Human Genomic DNA for Estrogen receptor Beta (SEQ ID NO:1) TTGGGGTCACCCCGGGGTTGCCAGGGCTCATGGAGGGTCGTAGTCTGGATTTTGTCACCCCCACGTCCCC GCCCCGCAGCAAGTCTGGGGTTGGAGAACTCACGCGGTCTTCGTAAGCTACATGCCAGTTGACCCTCGAG GAGGGATGCTCCCTCCCCTTAAGCGTCCACGCTGGAGAAGGAGTAAGATGGACAATTGCCTGGGGAGCCT GACAGGGCGGTGGCAGCTGGGATGCTGGAGAGGACTGGCCCCTTGTGTTACTGAGTCCAAGGAATATGCT TGCTCTGCTCTAGGAACCGCGTTCAGGTTACAGTCATCCCAGTAGAGTCCTGAAGATGCGTGGTTCAGGT CACTTAGGACTTGACCAGATACCGGGTTTCTTTTACAAGCCGTTTACTACTGGCAGAGCTCATCTAAAAC TTTTTTTGTTTGTTTGAGACGGAGTCTCATTCTGTCGCCCAGGCTGGAGTGCAGTGGCACGATTTT GGCTCACTGCAACCTCCGCTTCCCGGGTTCAAGCAGTTCTCTGCCTCAGCCTCCCGAGTAGCTGGGATTA CAGGCACCACCTAATTAGCCCGCCACCACGCCCGGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCA CCATCTTGGCCAGGCTGGTCTTGAACTCCTGACCTCGTGATCCACCCGCCTCGGCCTCCCAGAGTGCTGG GATTACAGGCGTGAGCCACCGCACCTGGCCTAAAACTGATTTTTTATTAATTTTGGGGCTTTTAATATTT TTTTCTTATTTCTAAATTCTGAGGTTATTTATAGTAGCCCCCATATACGGGATTAGATAATCTCTTGTGAT AGGGTGGAGTGCAGTGGCATGATCTCCGCTCTTTGTAGCCTCTGCCTCCCGGGTTCAAATGATCCTCCCA CCTCAGCCCCCGAGTAGCTTGGACCACAGGTGCATGCCACCACGCCGGCTAATTTTTCTATTTTTGGTA GAGTTGGGGTTTCACTATGTTGACCAGACTGGTCTAGATCTCAAGGGATTAGTCTCCCTTGGCCTCCCAA AATGCTGGGATAATGGGCATGAGCCACCGTGCGTGGCCTTAAAGTTACTATTCTTAAAGTTTGCACAAGT GATATGTTAAAGGCACAGACTTAGTAATATAATGTCATTATAATAATAACCCTAAAACACATTGTCTCAT ATTGTGTTGTACCTAAACAAGTGAAATTAAGAAGAAAATTGAAGGAAATGTTTCTGGTAAATTGCAGATA GTGAATCTTTTGTCTTATACTATCAAATAGGTATTGACTATTCCAGCTTTCTTATTTGTTGAGGAAGATG GCAGAAATCCCATTTTACAGAGGGATAGACTTTGAAGGATAATACCCAAAGCTGCATAGCTGTGGCTGGT ATAGGCCCCAAACCTGATGTTTCTTCTCTAAATCTACTGCCTTTGCCATCTCAACAGCCTGGTTTTTGAC AGTTATCTATGTATGAGTTGCATAAATCGTTCATTCATGGAGCAAATAATTATTGAGTGGCCACTATGCC AACAGCACTGCTATAGATGCTAGAGATACCCTAGTGAACCAGCAAAGTTTCTGCTCTCAGCTCATATTCT GGTGGAGGAGACAACGATCAAGTTAAAGAAATACATAGGCTAATTTTAGAGATTATGACATGCTATATTT TAAAAATAGGCAAGCTAAGAGGATAGGCAGTGATGCTGGGAGGTGGGAAAGTTTTGTCTCAGAAATGTGG TAAGAGATTTCTTTGGGCATCTGACTTCAGCAGAAACCTTAATGAAGAGAGGAACTTGGAATGTAAAAGA AAGAAAGCAGGGATTTGCTCTGAGCAACTGGAAAGATGGAATTGCCATTCGCTGAGTTGAAATAAAGTAA AATGTAGGACTAGGTTTTGGGGTTAAGATTATGAATTCGGCTTTAGACATTTTTAGATTTCTCTTAGACA AGAGGACCAAAGACTGACACCTAGAACCTTTCAGTGTTCAGAATGCAAGGAGACAGGAGGAACCAAGAGG GAAGATTGAAAAGGAGAGTCCAGCTGGGAGCTGTGGCTACACCTTTACTAATCCCAGCACTTTGGGAGAC CAAATACAGGAAGATCACTTGAATCCAGGAGTTTGTAGAACAGCCTTAGCAACATAGCAAGACCCTGTCT TGAGGTCAGGAGTTTGAGACCAACTTGGCCAACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAATT AGCTGGGCGTGATGGCTGCTACCTGTAATCCCAGCTACTCGGGAGGCCGAGGCAGGAGAATCCCTTGAAC CTAGGAGGCAGAGGTTGCAGTGAGCCGAGATCACGCCACTGCACTCCAGCCTGGGAGACAGAGCGAGACT CCATCTCAAAATAAATAAATAAAAAATTTAAAAAGTTAGCTGGGCGTGGTGGCATGTACCTGTAGTC CCAGTTACTCAGAAGGCTGAGGTGGGAGGATCCTGTGAGCCTAGGAGTTGGAAACTTCAGTAAGCTATAA TCATCACACTGCACTCCAACCTAGGCAACAGAGCAAGACCCTGTCTCTTAAAAGGAAAAGGAGAGTCCAGT GTGTTCTAAGGAAAACCCCAAGAGCATCCCACCTTAGAAGACAAGTGAGGAGGCCTGGCATGGTGTCTCA $\tt CTGACAAACATGGCGAAACCTCCGTCTCTATAAAAATACAAAAATTAGCCAGGTGTGGTAGCGCGTGCCT$ GTAATCCCAGCTACTAGGGAGGCTGAGGCAGGAGAACTGCTTGAACTCAGGGGGCAGAGTTTGCAGTGAG GTGTTGCAAATTGGTCAAATAAAGAATGAAAATCAACCTTTCACAGCAAATAGAAGGAAAAAATATTTTT ATTTAAATGCTTATAAAGGCAGTTGCTAGAAAAAATGTTTACTTTTTGCAGAGGCCCCGTTTTTACAACC ACCAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACTGAAACCTCCGCCTCCCAGGTTCAAGCAATTCTT CTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGTGGGCGCCACCACACCCAGCTAATTTTTGTATTTTT ${\tt CCTCCCAAAGTGCTGGGATTGGTACAGGTGTGAACCACCATACCTGGCCCGAAAATTTTAAATTTGTATT}$ TGGAGTGCAGTAACACAATCAGCTCACTGCAACCCTGAACTCCTGGGCTAAAGTGATCCTTCTGAGTAGT TGGGACTATAGGCACATGCCACCACCCTGACTAATTAAAAAATTTTCCTGTAGAGATAGTCTTGCTATG TTGCCCAGACTGGTCTCCAACTCCTGGCCTCAAACCATCCTCCCACCTTGACCTTCCAAAACGTTGGGAT TATAGGCTGGGTGCAGTGGTTCACGCCTGTAATCCCAGCACTTTGGAAGGCCGAGGCTGGTGGATCAACT GAGGTCAGGAGTTCAAGACCAACCTGGCTAACATGGCGAAACCCCATCTCTACTAAAAAATACAAAAATTA GCTGGGCGTGGTGGCCAGCCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGGATAGCTTAAACC CAGGAGACGAAGGTTGCAGTGAGCCAAGATTACACCATTGCACTCCAGCCTGAGCAACAAAAGCGAAAACT CTGGAATGCAATGGTGAGATCTAGGCTCCGCTTCTCAGGTTCAAGTGATTCTCCTGCCTCAGCCTCCTGA GTAAGCTGGGAATACAGGCGCCCGCCACCACGCCCAGGTAATTTTTGTATGTTTAGTAGAGACAGGGTTT CGCCATATTGGCGAGGCTTGTCTCAAACTCCTGACCTCAGGTGATCCACCCCACCTCCAAAAGTGTTGGGA TTACAGGCATCACCCACCGCGTGACCAGCTTTTATACATTTTTAAATGATAAAGACAGGTTAATAAAA TGTATAATATTATGTTGCTATATCCAAAAAAAGGCCTTCTTTGATTACACTATCAAAAGTTACCTCTCCA TTTACATCCCCATTACTATCTCATTAACCTGTTTTATTCATAGCACTTACTACCATCTAAAATGACTTTA TGTTTGTTTTGAGATGGAGTCTTGCTCTGTTGCCCAGACTGGAGTGCAGTGGGTGCGATCTCAGCTC ACTGCAACCTCTGCCTCCTGGGTTCAATCAATCCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGG CATGTGCCACCATGCCCAGCTAATTTTTGCATTTTTAGTACAGCAGGGTGTCACCATGTTGGTCAGGCTG GTCTCAAACTCCTGACCTCAGGAGATCCGTCAGCCTTGGCCTCCCAAAGTGTTGGGATTACAGGCGTGAG CCACAGCACCCAGCCAGAATTTAAACTTTATAAGAGATTTCCTGTCTTGTTCATACTTATATACCTGCAG CTTCGAAACATATATATATGTTTAATATATATATAGATATATTTTAAATTATATATAGAGAGAGATGGAGT TTCACTCTTGTTGCCCAGACTGGAGTGCAATGGCGTGATCTCGGCTCACCACAACCTCTGCCCCCGGGT TCAAGCAATTCTCCTGCCTCAGCCTCCAGAGTAGTTGGAATTACAGGCACGTGCCACCATGCCTGACTAA TTTTGTATTTTTAGTAGAGACAGAGTTTCTCCATGTTGGTCAGGCTGGTCTCGAGCTCTTGACCTCAGGT AGTCCGCCTGCCTCGGCCTCACAAAGTGCTGGGATTACAAGCATGAGTCACTGTGCCCTGCCAGAATTTA TGTATATATACATACATTATATATATATTTTTATATATTATAATTATAAACTCCTGACCTCAGGTGATC CACCTGCCTCAGTCTCTCAAATGCTGGGATTACAGGCGTGAGCCACCACGCCAGGCCAGAAACATATTTT TGCCCAGGCTGGAGTACAGTGGCACAATCTTGGCTCACCGCAACCTCAGCCTCCCGGGTTCAAGCAATTC TCCTGCCTCAGCCTCCCGAGTAGTTGGAACTATAGGCGTGAGCCACCATGCCCTGCTAATTTTTGTATTT TTAGTACAGATGGGGTTTCACTATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTTGTGATCTGCCCACC TCGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACTGCGCCCGGCCTATTTCTTCTTCTTTGTT TAGTTATTATCTATTACTCTCATTCCTATGAACATAACTTGTTTCTCCCCCCTTAATTTTTATCATACAT GATTGTAGACAGTGGGCACTGTCTTCAATTATAGTGAATTTAGCAGTAAATTCACATTAGACCAACTTGT AAGGTTCATTATTCTTTGAAGATAAGATGATGTTTGAATAAAATTCCTGGTGATTCTGGTATCAAAAAATA CAAATTTGGGACATACTTTTTCTGCTGTAAAAATATTTTCCTAAGGCCAGGCGCAGTGGCTCACGCCTGT AATCCTAGCACTTTGGGAGACGGAGGCGGCAGATCACTTGAGGCCAGGAGTTCAAGACCAGTCTGGCCAA CATGGTGAAACCCAGTCTCTACTAAAAATAGAAAAATTAGCCAGGCATGGTGGCACGTGCCTGTAGTCC CAGCTACTCAAGAGGCTGAGGCAGGAGAATCCTTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCTGATAT AGAGTTTCACTCCTGTCGCCCAGGCTGGAGTGCAATGCCATGATCTCGGCTCATTGCAACCTCTGCCTCC TGAGTTCAAGCAATCCTCCTGCCTCAGCCTCCCGAATAGCTGGGATTACAGGCACCTGCCACCATGCCCA GCTAATTTTTGTATTTTTAGTAGAGACTGGGTTTTACCATGTTGGCCAAGCTGGTCTCGAACTCCTGACG TCAGGTGATCCACCCAGCTCATTCTCCCAAAGTGCTGGAATTACAAGCATGAGCCACTGCACTCGGCCTT TATTTATTTATTTTTTTGAGATGAAGTCTTGCTCTGTTGCCCAAGCTGGAGTGCAATGGCATGATCTC GGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCAATTCTCCTGCCTCAGCCCCCTGAGTAGCTGGGATT A CAGGCGTGCACCACCACCCCTGGCTAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACTATGTTGGTCAGGTTAGTCTCGAGCTCCTGACTTCGTGATCCGCCCCGCCTCAGCCTTCCAAAGTGTTGGGATTACAGGCG TGAGCCACCGCGCCTGGCCAGAATCCCAGTTTTTTAACACATCTAATGCTTTAGGAATAGTAAATGGAAA TAGCCAAGAATTTCACAAAAGAAGCCCAAAATATGATTTTCACGTTTACTGGACTGTTCACTTTTGGGGG GATCACTTTCTTAAGATTACTTAAAGTACTAATGCTTGATGAAAATCATTTGTGTTTTCACTTCATTAAT TGGAGAAAGAGCTACATGTTTTTGTTGTTGTTGTTGTTTTTGAGATGGTGTCTTGCTCTGTCTCCCAG GCTGGAGTGCAATGGCGTGATCTCAGCTCACTGCAACCTCCGCCTCCCGGGTTCAAGCGATTCTCCTGCC TCAGCCTCCTGAGTAGCTGGGACTACAGGCGCCTGCCACCACGCCCAGCTAATTTTTATACTTTTAATAG AGACAGGGTTTCACCATATTGGCCAGGATGGTCTCAATCTCTTGACCTTGTGATCCACCCGCCTTGGCCT TAGAAGGTCCTTTTTCTTTGTACCTCTGTGATGTGTTCACCTAGCAACAGCTTCTTTGATATGCAAACAT TCTACAGGCAAATTGCTCAGAGCAGCTACTCATGTTGGACAATTCAGGTCTCTTCTGGAAACTGGCCTTG TATTTGGAATTTTCTCCAGAGTCTGATGTGGTAAAAATTTATACTTTTCACTTCTTACTAAATGCAGCAT AGCATACTACATCTTTTGAGTGTGTAAAAAATAAAGTAGTCATGTACAAACCTAAAATCACAGAATAATC ATGTAATGGTGCTATATTTTATTTTTACTTTAGATTCCTAATACATTTTTATTGTATCTTTATAAGGTTA GTTTGGGAGAATAGCACTATCATCTATATTAGTTAACTTTGCATTAAGGTTTTTCATTAAGGTTTTT GCTGGTGGCACAATCATAGCTTACTACAGACTAACTCCTGGCTCAAGCCATCCTCCACCTCAGCCTCCCA AGTAACTGAGATTACAGGTGCACACCACCACCTCTGGCTAATTATTAAAATTTTCATAGAGACAGGATCT CACTTGGTTGGCCAGACTGATCTCAAACTCCTGGTCTCAAGTGATCCTCCCACCCCAGCCTCCTGAAGTA CTAGGATTGCAGGCATGAACCACTGCCCTGGCCTAGATACATTTAATGTAGTAGAGAGATGAGATTTTT ACATAGTATAATATTGAATGAGACAACAGTCAAAAGAAAATCACATACTATAAGAGAAGAGATTACCCTT ACCTTTTAGGAATCAAGAAAACTCCCTGGAGGAGATGGTACTTGAACTTATACTGGAGGATTTATATGTT TTTTTTTTTTGAGGCAGAGTTTTGCTCTGTTGCCCAGGCTAGAGTGCAGTGGCGCGATCTCGGCTCACTG CAACCTCCGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCTAGTAGCTTGTTTCTTAGAGACA GTGTGAGTGAAACTCATTAAGTAAAGTCAATACAGCACAAGTTTCATAAAATGGTAAAGAAATAGAAATA AAAGTAAAGGATGAAATTCTTAAGAACTTTGTCAGGCCGGGCGTGGTGGCTCATGCCTGTAATCCCAGCA CTTTGGGAGGCCGAGGTGGGTGGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAA ACCCTGTCTCTAAAAATACAAAATTAGCTGGGCATGCTGGCGGGTGCCTATAATCCCAGCTACTCGG GAGGCTGAGGCAGGAGATCGCTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCCGAGATCACATCATTCC ACTCCAGCCTGGGTGCCAAGAGCAAAAAACTCCATCTTGAAAAATAAAGAATTTTGTCTCCAGTATCATT $\tt CTTGTTCTAGGACTGAGAAACAGTTCATTCTTCATTTTCGTCTACTAAAATTTAAGTTCTTTGATTTTCT$ TCTTTAGGTCTTGGAAAAAGAATTAATAGAGTAATTTTCTTAGGTATCAAGTAATGAAAATGAGAAAAGA ${\tt CACCCAGGCTGGAGTGTAGTGGCTCCATTATGGTTCCCTGCAGCCTTGAACTCAGGGGCCCAAGCAATCC}$ TCCCACCTCAGCATCCCGAGCAGCTGGGACTACAGGTGCATGCCACCATGCCTGGCTAATTTTTGTGCTT TTTCGTGTATAAAGATGAGATTTCGCCATGTTGCCCAGGCTGGTCTCAAACTCCTGGGCTCAAGAGATCT GTCCACCTCAGCCTCCTAAAGCGCTGAGATTACAGGCATGAGCCACCACGTCCAGCCTAGAGATATTTAT TTAGTAAAAGAAAGTCAAGCCCTATGCCTCCTGTTCTACATTCCTCAAATCACATAATCCTGATTTTTTC CTCTTCGTATGAAAATTCCTCTCATTTTGGGCCTGTTTGATTTTTTGGGAGACACCACCCAGCAGAAACA GATCCTAAAAAAGAAATCCAGTGGCACAATCACGGATCTCTGCAGCCTTGATCTCTTAGCCTCAAGTGA CTTTGTTTTTTTGTAAAGATGTGTCTCACTATCTTGCCCAGGCTGATATTGAATTCCTGGGCTCAAGTGA TGCTTTCCCTCTTTTGGCATAGAAAAGCTAATAAAGCTTAAACTTAAATGGAACTTGTATAAACACAATA CTAATGCTAAGAAGTTTATAATTTTTGATAATTCAGATTTGGATTAGATTAAGATTTATGTCTATGCATA ATTCATTAAAAACTTTTTAAACCAAATTGTCAAAAAAGATTGTAGGTACCTTGTTTAAAGAAAATATATA AGCTAGTTTCAAGAATTCCAAAATATTTTTTAAAAGCAGCTCTGTACATGTCGATAAATTATTTGCTCAT TGTAATTTTTTGAATCTGTTTGTCAAAGCAAATGTAGACGGGCTCGAACTCCTGACCTCAAATGATCCAC $\tt CCGCCTCAGTCTCCCAAATGCTGGTATTACAGGCATGAGCCACCGCTCATGGCCTGTTATCATTTTTAAT$ TGAAAATTTTACTGAGATAATTGTAGATTCACTTGCCATTATAAGAAATAATTCAGAGATATCACTTGTA TACTTAGCCCAGTGTCCCCCAAAGGTAAAATTTTGCAAAATTATAGTCTAATGTAACAGCGTGAATATTG ACATTAATACAATCCACTGAGTTTATTCAGATTTCCCCAGTTTTACTTGTATTCAATTGTGTTTTGTGT ATTAAGTTCGATATAACTAGTCAATATACTGAACAGTTCTAACATCACAAGTATCCTTCAGGTAGCCCTT TTGTATCCACATCCACTTCCTTCATCCCCAGCTATTGACAACCACTAATCCCTTTTTCCATTTCTAAAA TGTGATTTCAAAAATGTTACATACTTGGCTGGGGGCAGTGGCTCATGCCTGTAATCCCAGCACTTTGGAT ATACTGTCTCTACTAAAAATACAAAAATTAGCTGGGAGTGGTTGTGCACACCTGTAATCCCAGGTGCTTG GGAAGCTGAGGCAGGAGTTGCTTGAACCCAGGAGGCAGAGCTTGCAGTGAGCCGAGAGTGTGCCACTT TTCTCCAGATCACATGCAGGCTATTAAGAAATGTGAACTAACAAGTTAAAGTAGCAGGACGGGCGCTGTG ${\tt GCTCACACCTATAATCCCAGCACTTTGGGAAGCTGAGGCAGGTGGATCACTTGAGGTCAGGAGTTTGAGA}$ ATACCTGTAATCCTAGCTATTTGGGAGGCTGAGGCATGAGAATCGCTTGAACCCAGGAGGCAGAGGCTGC AAATGTTAGTAGCAGCAGAGCACAGTGGCTCATGCCTGTAATCCCAACACTATGGGAGTCTGAGGCAGGA GGATCTCTTGAGCTTAGGAGTTCAAGACCAGCCTGACAACATAGTAAGACTCCATCTCTACAAATAATCA TTAAAAAAATTAGCCGGGCGTAGTGGCACCTACCTGTAGTCCCAGCTACTGGGGAGGCTGAGATGGGAGG ATCACCTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCTGTGATCGCCATTGTACTCCAAACTGGGTGACAA GAGTGAGACCATGCCTCAAAAATAATAATAATAATGTATAATTTAAATGTGACCTAACATTATGAAGTT TTTAAAAACAAAATTATAAATGATTTTAACACTTTCTCATTAGCTAAGAAATCTTCAGAACAAACTTTTC ATAAAAGAAACTTCACTGCAAGAGTTGAAGCCTGAGCTAGAAAGTTACAAAGAAAATAATGTACGACAGT CGTTCCAGATAATGTCCCTGAAAGATAATATCAAGGACCTACAGAAACTTACTGCTTCTCTAACCAGAAT TAAATATTTGAGAAACACCAATATTCAGAGGCCTCAAAGAGGCAACTGGAATTTAACTAAATGAATTATT AAATAGCATATGAACTCCATACTCCTGATTGATCATAGAATTTAAATCTGCAGAATTTCACTTAATACCT GACCCAACATTATTATTTTTGTATTGAGATATAACTTAAATACCTCGGGCCAGGTGTGGTGGCTCATGC CTATAATCCCAGCACTTTGGGAGGCCAGGGCTGGTGAATCACTTGAGGTCAGGAGTTCAAAACCAGCCTG GCCAACATGACAAAACCCTGTCTCTACTAAAAATACAAAAAATTAGCTGGGCATGGTGGCATGCACCTGT AATCCCAGCTACTCAGGAGGCTGAGGTAGAAGAATCACTTGAATCCAGGAGGTGCGAGACTCTGTCTAAA AAAAAAAATCCAATTTGAGATATAACTTACATACCTCAAGATTCAGTTAAAGTGTACAATTCAATGGTT GTACAATCACCACTATCTAATTTCAGAACAATTTCATCACACCTCCCCACCCCCACTGCAAAAAAA AACCCATGCCGGCTGGGCACGGTGGCTCATGCCTGAGATCCCAGCACTTTGGGAGGCCGAGACAGGCGG GGTGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATAGCTTAAATCCAGGAGGCTGAGGTTG AAAAAAAAAAAAAAAGATTTAATGATTGACCTGCTGGATTTTGAACTTGCATGGGGCCTATAGCCTCTT TCTTTTGGCCAAATTCTCCCTTTTGGAATGAGAGTATTTACCCAATGCCTGCAATTCCCATTATATTTCG GGCTGGAGTGCAATGGCACAATCTCGGCTCACTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCTGC CTCGGCCTCCCAAGTAGCTGAGATCACAGGCATGCACCACCACCCCCGGCTAATTTTTTGTATTTTTTAGCA GAGATGGGGGTTTCACCATGTTGGCCAGGCTAGTCTCCAACTCCTGACTTCAGGTGATCCACCGGCCTTG GCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCCCAGCCCGAAGTTACTAACTTGTTTTGGA $\tt TTTTACGGGCTCACAGGCAGAAGGGACTTGCCTTGTTTCAGATGAGACTTTGTTCTTTGGGCTTTTGAGT$ TAATGCTGGAATGAGTTAGAACTTTGGGGGAACTGTTGGGAAGGCAGATTGTATTTTGAAATGTGAGAAG GACATGAGATTTGAGAGGGCCCAGTGGGAGAATGGGATAAGGCTTGAGTCTGTGTCCCTGCCCAAATCTG ${\tt ATGTCAAAGTATAATCCCCAGTGTTAGGGCCTGGTGGGAGCTGATTGGATCATGGGGGTGTATTTCCCCT}$

TTGGTGCTGTTCTCATGATAGTGAGTGAGTTACCATGAGATCTGGTTGTTTAAAAGTGTGTAGCACCTCT CACCTCACTCTATTCCTTCTGCTCTGGCCATGTAAGATGTGCCTGCTTCCCCCTCACCTTCTGCCATGAT TGTAAGTTTCCTGAGGCTTCCCTAGCCATGCTTCCCATGCAGCCTGTGGAACTGTGAGCCAATTAAACCT CTTTTCTTTGTAAATTACCTAGTCTGAAGCATTTCTTTACAGAAGTGCAAGAACAGACTAATACATTGAA CATCTCTTCATGTGCTTATTGGCCATGTGTATATCTTCTTTGTAGAAATACCTATTCATATTTGTTGTCC $\tt CTTTTAAAATTGGGTTGTCTTTTATTGCTGAGTTGTAAGTGTTCTTTATATTTTCTGGATACTGGACTT$ TTATTAAGTGTATAATTTGTAAATATTTTCTCCCAATTTGTGGGTCATCTTTCCACTTTCCTAAAAGTGT GTCTTTGGTGTCATAGCTGAGAAATTATTGTCAAATCCAGGATCATGAAAGATTTACATCTATATTTTCT ${\tt TTTAAGAGTTATAGTTTTGGCCGGGCGTGGTGGCTCATGCCTGTAATTCCAGCACTTTGGGAGGCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCAAGGCCCAAGGCCAAGGCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCAAGGCCCCAAGGCCCAAGGCCCAAGGCCCAAGGC$ CAGGTGGAGTTCGAGACCAGCCTGGCCAACATGGTGAAACTCCGTCCCTACTAAAAATACAAAAATTAGC TGAGCATGGTGGCACACGCCTGTAATCCCAGCTGCTCGTGAGGCTGAGGCAGAAGAATAGCTTGAGCCCG GGAGACAGAGGTTGCAGTGGGCCAAAATCATGCCACGGCACTCCAGCCTGGCCGACAGACTCTGTCTCAA AAAAAAAAAAAGATTTATAGTTTTGGCTGGGCGTGGTGGCTCATGCCTATAATCCCAGCATTTGGGGAGG CCAAGGCAGGTGGATAACTTTAGGCCAGGAGTTTGAGACCAGCCGGGCTGACATAACAAAACCTGATCTC TACTAAAAGTACAAAACTTAGGCTGGGCACAGTGACTCATGCCTGTAATCCCAGCACTCTGGGAGGCCGA GATGGGCAGATAATTTGAGGCCAGGCATTGGAGACCAGCCTGGCCAACATGGTAAAACCCTGTCTCTACT AAAAATACAAAAATCAGCTGGGCGTGGTGGCACGCACCTGTAATTTCAGCTACTCGGGAGGCTGAGGCGG GAGAATTGCTTGAACCCAGGAGGCAGAGGTGGCAGTGAATTGAGATCATGCCACTACACTTCAGCCCGGG TGATAGAACGAGACTCTGTCTCAAAATAATAATAATAATAATAATAATAGCTGGACATGGTGGTGCACAC CTGTAGTCCCAGCTACGTGGAAGGCTGAAGCAGGAGAATTGCTTGAACCCAGAAGGTGGAGGTTGCAGTG AGCCAAGATTGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACAGGTGTACTCCAGACTGGGTGAC ACTACAGTTAGTTTATATATAGTTTTAGTTAAAACTATAGTTTAGTTTGAGCCAGGCGCGGTGGCTCACG GTCGGGAGGCTGAGGCAGGAGAATCCCTTGAACCCGGGAGGCGGGGCTTGCAGTGAGCCGAGATCGCACC AAAGCCATAGTCTTTCTAAAACTATAGTTAGTTTATAATTAACTATAGTTTTAGTTATAAAATATAACTA GGTAGGAGTCCAGATTCATTGTTTTTCATATAAATATCCAGTTGTCCTTAGCACCTCTGTGGAACTATCT TGGCATTCTTGCCAAGAATCAATTGACCATAAATGTATGGGTTTATCTTTGGGCACCCAATTCTATTTCA TTGGTCTGTATGTCTGTCCTTATACCAGCACCACACTGTCTTGATTAATGTAGCTTTGTAGTAAGTTTTG AAATGGGTAAGTGTGAAAAATTCCAACTTAATTTCATTTTTTCAAGATCATTCTGGCTATTTTGGGTCC CTTCTTTAATTTCTTTTTTTTTTTCCCCGAGATGGCGTCATGCTCTGTCGTCCAGGCTGGAGTGCAGTG GCACGATCTCGGCTCACTGCAACCTCTGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCTGAAT CATGTTAGCCAGACTGGTCTTGAACTCCTGACCTTGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTGGG ATTACAGGCGTGAGCCACCGCGCCTGGCCTTCTTTTTCTTTTCTTAGAGACAGGGTCTCACTCTGTTAC CCAGGCTGCAGTGCAGTGGCACAATCATAGTTCAGTGTAATCTTGAATTCCTGGGCTCAAGCAATCCTCC TGCCTTGGCCTTCCAAAGCACTGAGATTACAGGCATGCACCACCACCCAGCCTCTTTAAATTGTTTTA ACAATGTTTTGTAGTTTTCAGTGTATGTGTGTTACATTTCTTTTGTTAAATTTATTACTAATATTTTATT CCTTTTATGCATTGTAAATGAAACTGTTTCCATATTTCATTTTTTGATTGTTTATTTTTAGAGAGTAGAA ATACAATTGATTCGTGTATATCAGTCTTTGTCCTGCAAGCTTGCTGAACTCACTTATTAGCTCTAGGGTT TTTTTGGTATGTGTGTGTGTTTCCTTGGGATTTTCTCCATACAAGACTATGAATCTGCAAATATGTGGG TTTTTAAAAATTTACTATTATTATTATTTTGAGATGGAGTCATACTCTGTCATCCAGGCTGGAGTGCAG TGGCACGATCACAGCTCACAACAACTTCTGCCTCCCAGGCTCAAGCAATTCCCCTGCCTCAGCCTCCTGT AGCTGAGATTACAGGAGTGAACCACCATGCCTGACTAATTTTTGCATTTTTAGTAGAGATGGGGTTTTGC CATGTTGCCTAGGCTTGTCTCAAACTCCTGGGTTCAGGCTACCCACTTGCCTTGGCCTCCCAAAGTGCTG GAATTATAGGCGTGAGCCACCACACCCAAATATTGTTGAGTGTTTTTAATCACAAAAGTGTGTTGGATTT TTTGTCCAATGCTTTTTTTTTTTTTGCATCTTACTGAAATAATCATGTGATTTTATCCTCTATAGAATTTG CAGGAGAAACAAAGTCATTAATTTTTCCTCTTATAATAAGAATAATATTTGAGAAACTCACACAATATGA AAAGCTATTCTATTCAGATGTGCACACTACTGTAGCCTATTTCTATTTTGTATTGGTTAGTATGCATCAG GAGTCGGAATCTCACTCTGTCGCCGAGGCTGGAGTGCAGTAGAGTGATCTTGGCTCACTGCAACCTCTGC CTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACGACAGGTGCACGCCACTCTG $\tt CCCAGCTAATTTTTGTATTTTAGTAGAGATGGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCT$ GACCTCAGGCAAGCCACCCACCTCAGACTTTCAAAGTGCTGGGATTACAGGCGTAAACCACTGCGCCCAG ATATTAGTTAAACTTAAGGGCCTGAAACAAGGAAAATGGGGTTTGCTTTTTTCTGGTTGTGCAGAGAGTG TATGAATAAAAGATCTCACAAAGTTCAAGTGAAAGACTGATTAAAAGAAATTCATCCAAATATCTT CTCAGTGTTAAGCAAGCACATGAAGTTAGCTATAGCTCGACCCTTAACAGCTAATCAGGTAAACTCTTCA ACTCAGTTTTGAACGTAACATAGTATACTACAGACTTTTTGTTTTTTGTCCTCAGAGGTAAAGAGAAACAA TGGCTATATGGCATACTATGAGGATTAATTTTATATGTCTACTTGACTGGGCCATAGGGTGCCCAATATA TGGTCAAACATTATTTTAGGTGTTTCTGTGAGAGTGTTTTGGATAATTTTAACATTTAAATTGGTATACT GAGTAAAGCAGATGATACTCCCTATTGTGAGTAGGCCTCATCCACTGAGTTAAAGGCCTGAATAGAACAA GCTACACTATCAGCTCTCTTGATTTTCAGGCCTTCAAACTTAGACTCAAACTACATTATTGGCTCCCCTG GAGATGGGATCTTCCTCTGTCACCCACACTGGAGTGTAGTGGTACGATCATGGCTTACTGCAACCTCAAA CACCTGGGCATAAGTGATGCTCCTGACTCAGCCTCCTGAGTAGCAGGGACCACAGGCACATGCCACCATG ${\tt CCCAGCTAATTTTTAAAAATTTTTTGTAGATACAAGGTCTCACTTTGTTGCCCAGGCTGGTCTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGAACTTGA$ GCTGGGCTCAAGCTATCCTTCCACCTCAGCCTCCCAAGGTGCTGGGATTATAGGCATGAGCCACTGTGCC TCTATACTCAGTGAAATTATCCTTCAAAATTGAAGATGAGGCCGGGCGCGGTGGCTCACGCCTGTAATCC TAGCACTTTGGGAGGCCGAGGCGGGCGGATCACGAGGTCAGGAGATCGAGATCATCCTGGCTAACATGGT GAAACCCCGTCAGTACTAAAAATACAAAAAAAATTAGCCGGGCATGGTAACGGGTGCCTGTAGTCCCAGC TACTCGGGAGGCTGAGGCGGGAGATGGCGTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATCGCG TATTAAGAAACACACCAGGCAATTTTTCAGGATGAAGGAAAATGATCCTTGGTGGCTACAGAGAAATGTA CAATTTATAATATATGAAAGAGTAAAACATATCAGTAGTACAAGGGCAAGAAATGGTAAATGGAGTTAAG AGCTCACACCTGTAATCCGAGTACCTTGGGAGGCTAAGGAGGGCGGATCACTTGAGGTCAAGAGTTCGAG ATCAGCCTGGCCAACATGGTGAAACCCCACCTCTACTAAAAATACAAAAATTAGCCAGGTGTGGTGGCAC ACGTCTGTAATCCCAGCTACTTGGGAGGCTGAAGCATGAGAATAGCTTGCACGTGGGAGGCGGAGGTTGC AAAGCATGTAATAAATCAAATATGCATTATGTAATCACAAAATCCAGCTTAACAACTAAATAATAATTA AAAGATATTAAAAACTTAATATGGAAGAAAAATGAAATAAAAAACTTTATTAATCCAAGGCCGGGCGCGG TGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGACCACTTGAGGCCAGGAGTTCCA GACCAGCCTGGCCAACATGATGAAACCCCGTCTCTACTAAAAATACCTGGGCAAAGTAGAGCATGCCTGG GAGATCGAGACCATCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAGAATTAACTGGGCA TGGTGGCACATGCCTGTAATTCCAGCTACTCTGGAAGCTGAGGCAGGAGAATTGCTTGAACCAGGGAATC AGGTTGCAGTGAGCTGAGATCATGCCACTGCATTGCAATCTGGCGACAGAGCGAGATTCTGTCTCAAAAA AAAAAAAAAAAAAAATTAGAGCATGCCTATAATCTGAGCTACTCAGGAGGCTGAGACACGAGAATCACT TGAACCCAGGGCGGCGGAGGTGCAGTGAGCAGCGATCACACCACTGCATTCCAGCCTGGGCGACAGAGTG AATTTCAATAATAACTTTAAAGATAGATGGTATTGTAACTGCCCAATGGGTTCACCTTGCCCGCTGCCTA GGGAGACCAGAGTTTTATTATTACTCAAATCAGTATCCACAAGCATTCCGCCTTCAGAATTTTTAAGGAC AACATGTTGGGTGGGAGGAAGCCAGTGAGCTGGGAGTGCTGATTGGTCAGAGCTGAAATCATAGGGAATG GAAGCTGTCTTCTTAAGCTGAGTCAATTCCTGGGTGGGGACTGCAAGATCAGATGAGTCAGGTTATCAAT TTTAGGGAGGGTCAGAATCTTGTAGCCTCCAGCTGCAAGACTCCTAAACCATAATTTCTAATCTTGTGGT TAATGTTAGTCCTACCAAGGCAATCTAGTCTCCAGGCAAGAAGGAGGTCTGCTTTGGGAAAGGGCTGTCA ACAAGGACAGTTTGGAGGTTAGAAACAAGATGGGGTCAGTTAAGTTAGATCTCTTTCACTGTCTCAGGCA CTAAGCATTTTTCAAGAAACATACTGTAGGCCGGGTGCAGTGGCTCACGCCTGTAATTCCAGCACCTTGG GAGGCTGAGGCGGGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAACATGGTGAAACCCCGTC TCTACTAAAAACACAAAAAAATTAGCCGGGTGTGGTGGCGGGCACCTGTAGTCCCAGCTACTCAGGAGGC TGAGGCAGGAGATGGGTCAACCCAGGAGGCAGAGCTTGCAGTGAGCCAAGATCCTGCCACTGCACTCCA CCTATAGTCCCAGATACTTGGGAGGCTGAGGCAGGAGGATAGCTTGGGACCAGTTTGAGACCAGCCTGAG CAACATAGCAAGACCCTGTCTCCAAAATTTAAAAATGTTTAAAAAGAGATATATTTTACATATAAGAACA TCTATGTGGAACTGTTACCGGGAATGGGTCCCAATCTAGACCCCAAGAGAGGGTTCTTGGACCTCACGCA AGAAAGAATTAGGGGCAAATCCATAAAGTGAAAGCAAGTTTATTGGGAAAGTAAAGGAATAAAGAATGGC TACTCCATAGGTAGAGTCACAGTATGGGCTGCTTAACTGAGTATACTCAGTTATTTCTTGATTATATGCT CTTTTTTTAGACTGTATAGGGTAACTTCCTGATGTTGCCATGGTATTTATAAACTGTCATGGCCCTAGTG GGAGAGTCTTTTAGCATGCTAATGCATTATAATTAGTGTATAATGAGCACTGAGGACAACCAGAGGTCAC CTTTGTCACCATCTTGGTTTTGGTAGGTTTGGGCTATCTTCTTTATCGCATTCTGTTTCATCAGCAGGGT CTTTGTGGTCTGTATCTTGTGCTGACCTCCTATCTCATCCTGTGACTAAGAATGCCTAAGCTCCTGGGAA TGCAGCCAGTAGTTCTGAGCTTACTTTACCCAGCCCCTATTCAAGATGGAGTTGCTCTGGTTCTAATGCC CTTAAAAAGAATGGCTTCAAAATTGACCTCCCCCATGGGAAATATTGCAGGACTTAACACAGGATTGTTT TTTGCCCAGGCTGGAGTGCACTGGTGCAATCTTGGCTCACCACAACCTCTGTCTCCCCGGGTTCAAGCAAT TTTAGTAGAGACGGTGTTTCTCCATGTTGCAACCTCAGGTGACCCGCCCACCTCGGCCTCCCAAAGTGCT CAGGCTGGTTTCTAACTCCTGGGCTCAAGCGATCCACTGGCCTCAGCCTCCTGAAGTGCTGGGATTACAG CACAGCTCCTTTCATAAGAAATATATTTTAGGGCCGGGTGTGGTGGCTTATGCCTGTAATCTCAGCACTT CCATCTCCACTAAAAATACAAAAATTAGTCAGGAGTGGTGCTGCATGCCTGTAATCCCAGCTACTCAGG AGGCTGAGGCAGGAGAATCACCTGAACCCAGGAGGCGGAGGTTGCAGTGACCCAACATTGCGCCATTGCA AATCATTGTTATTCCTCAGAGTAAGAGCAAAGATCATCCCCTGCAGAAGCTTAGGAACTATGCACAGAAC TTTACAGAACAGGGGCGATGCTTTAACTGAAGGCTGACTACTGACCAGAGAATGGAATTCTGAGAGGGCT CAAGGAATAAAAGGAAACTAGGCAGGGAAAGGGAAGGCGCCCATCTGAAGCAAACTTCAGCGGCCATCAG ${\tt GATATCTTGTGGTGGTCACAAGTTGTAGGCTCTGTTTTTGGAAGGTTTGGGTATAGCGCAGGATTCCATT}$ TGTCTACTTGGCTACACCTCTGCCTGAGGTACACTGTTGCCAGAAAAGAGGGTCCCAATCCAGACCCCAA GAGCAGGTTACTGGATCTTGCACAGGAAATAATTCAAGGGAAGTCACACAGCACAGAGAAAAAAGCAAGTT CATACAATGTTACTGAGTAAGTTATCGCCAGAAAGCAGGAGGAGGAACACGCCATCCTTGTTAGTGTCTC TATTTATAAGAAACTTATGAGAAGCTATAATTAAACTTGGAACATGCAGATGTGCTCACTAAAGGTAGGG GCTATTGGTGTTATAGATGACCATTAATCTTTCAACCTAAGCCTGCTCATTAATGGCATCTTTAATAAAG TGGGCTACACTCTTAGGACATCTGGACATTCTGCAGGATTGGTGGGAGATGTTCTGTATGGCCACCAATA TTCTGTAATTATATTGGTGGTCAGCTTGGGATGTGGCTATTTTCAGACCACAAGCATTAACCTTACAGA GTGCCTAGCTCATTTCAAGGTGGAGTCACTCTGGCCATGTTTTACCAAACCAGAGGTCTGGTAAGGA TCCCAAATTGAGGATCAAGTTCCTCCAGAAATCATTGCTATGGGTGGCAAAGCAGTAGATTCCCTGAAGC CAATCTCCCACATTGTCTGGAATTTTGGGAGCTTCATTTGCCCAGTTGGCAGTGCCAATGGGGACCCCGC $\tt TGGAAGCCATAGTAGCACCTTTGGGCTCTGCATAGGACTTGCTCAATACACCATATTGGAGTCGTTGGCT$ $\tt CTTTTTGTTATTTTAAGTTGAAATTTGAAGATTGGCTGAGTTGGTTTCATGATATTGTTGCCTACTGATA$ TCTTACACAGAGTACGAGTACATCTGGTTGAAAGAGAAAAGGCAGAGAAAAGCAGACTTTTTGGAGTT GTTGTTCTCAGGCACTAACAGATTCATCCCTTATATGCATATGAATGGACAATAAGATTTCTTGGATATT TTCATGGCAAAGGTGAGGAGAAATTTTTATTGCTTTTTGAAGAAACATGATTTTTATTACCTTGGGTTAT TGCCGAGGCTGGAGTGCAGTGGAGTGATCTCTGCTCACTGCAAGCTCCGCCTCCTGGGTTCAAGTGATTC ${\tt TCCTGCCTCAGCCTCCAAAGTATCTGGGATTACAGGCATGTGCCACCACGCCCGGCTAATTTTTACATTT}$ CTAGTAGAGACGGGGTTTCACCATGTTAGCCAGGCTGGTCTCAAACTCCTGACCTTAAATGATCCACCCA CCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCACCTGGCTGAAGGGTCTTCAGTATCA TCTCTGTGATAGATAAATTGTTTAGTGGGTTATCTACATTGGCCATTGACATCTAGAATTAGGGTATGAG $\tt TTGGGTTTAGAAGAAGGAAATGAGGCTGGTCTCCAATAGACAGTGATTCATATGATAAGCAGAAAGTGTT$ ACAGAAGTCTGGTAGAGGAGGATGGGAGACAGATTATTGTCAAGGAGATAGTAAAAGTTTATTTTGAAAT TCACCTGAGGTCAGGAGTTCGAGACCAGCCTGACCAACATGAAGAAACTCGGTCTTTATTAAAAAATACAA AATTAGCCAGGCGTGGTGCATGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTT AAACTCCATCTCAAAAAAAAGAAAGAAATCCTTAGACTATAAGTTTGTTATAATCTGCATGTAAAACA TCTGCCTCCTGGGCTCAAGCCATCTTCTCACCTCAGCATCCTCGGTAATTTAGTTGGGACTACTGGCGTG CGCCACCATGCCCGGCTAATTTTCCTGTATTTTGTGGAGAGACGGGGTTTCACCATGTTGCCCAGGCTTG TCTCAAACTCCTGGGCTCAAGTGATCCTCCTGCCTTGATCTCCCAAAGTGCTAGGATTACAGGCGTGAGC CACCACACCTGGCCAATGACTTTCAAATTTGTTTAAAGTAATCCCAATCTTTATTTGCCTCTCCAAGTA ATTAATGATAACACTTTCTTTAAAAAAAAATGCTGTCACTAGGCTGGGTGCGGTGGCTCACATCTGTAA ACGGTGAAACCCTGTCTCTACTAAATACAAAAATTAGCCAGGTATGGTGGTGGCACCTGTAATTCCAGC TACTTAGGAGGCTGAGGAAGGAGATCACTTGAACCCCGGGAGGTTGGAGGTTGCATTGAGCCGAGATGGC ACAGACGGGGCATGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCAGAGGCAGGTGGATCACCTG AAGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAAACCCCACCTCTACTAAAAAATACAAAAAAATT AGCTGGGCACGGTGCCAGGTGCCTGTAATCTCATCTACTAGGGAAGCTGAAGCAGGGGAATCGCTTGAAC CTGGGAGACGGAGGTTGCAGTGAGCTGAGGTTGTGCCATTGCACTCCAGCCTGGGAGACAGAGCAAGACT CCGTCTCAAAAAAAAAAAAAAAAATATGTCACTAATCTCTAAGATCTCTGAATAACTCTCTCAGAATTA GAGTCCATACAGCTCTGATCTTTTCTTCTTTTATGCTGCTTGTTTTTCCAAGGCTTTTAGTGATGCAAAC TTATCATTACTTTAACAATTCCAGCTTTCCTTCTATGTCTTGGTTTTACACGACAAGAAGCCCAGAAACT GAACTTGCTTACTCAGCTCCCGAGGTTGAAGGTGGCAAGAAGGTGGTAAGAATCCTAGACAGGCTAGGCC TGGTGGCTCACGCCTATAATCCTAACAATTTGGGAGGCCAAGACAGGAGGATCGCTTGAGGCCAGGAGTT TGGTAGTGCACACCTGTGGTCCCAGCTACTCAGGAGGCCAAGTTGGGAGGATTGCTTGAGCCCAGGAGGT GGAGGCTACAGTGAGCAATGATGGCACCACACTCCAACCTGGGCGACACAGTGAGACTCTGTCTCAAAAC ACATTATTATTGTTTTTTCCTGTCATATTTCTAATGGAAACAGGATGATTACAAGAGTGCAGGGGAAAG GTTGGGGAAAAGAATGTGACTTCTTTCACTTTTACATTATTGAAATTGTTATTTAAATTGTATTCTATA TTATTTCAAAAGGCAAGGCATTTCAAAAATGCTGATTTTTAAAATTTCTATCATTTCTTATACACTTATT ${\tt AGCTCACATTTTCTGTAATGAGTTTACCCTTATCAAGTGGGACTCTTTGGTTAGCTGCTCCTCTAAGCT}$ ${\tt AATTTCTTGTATTCTCAAAGCAGTTTCTCCATACTATCATTTCAATACCTCTTGCTGTTCTAGTTTGCT}$

GTAGAGACGGGGTTTCACCATGCTGGTCAGGCTGGTCTTGAACTCCTGACCTCAGAGGATCCACCCGCCT TGGCCCCACAAGTGCTGGGATTCCAGGCGTGAGCCACAGTGCCTGGCCATGACTAACTCATTCCATTGA GGGTCTTTTCTCCTGAAGTTTTGTGCTATGACTTGATATTTCAAAAGAAGGGAAATAGATGTCTCAGTAT TAAATTTCAAACGGGAAGTTTAACCTGTATATTGGCTTATTTAGGGTAAGAGTGAAGCTATCCTGGACAA GAACTTTGACAGGACAATACTATTCACTCTGAAGGACCAAAAAATGAGCAGAAAATTTGGGATAAATGTC AATAAAACTGCAGTCCCAACATCAGAATTTCCTTGGTCAGTTGGTTATTGCGGGACAGCATTCTTCTGCA GAGAAATCTTGGAAATCTGTAAGTATATAGATATAAAAGTTATTCTTTCCAGTTTGATTCTTTATGATG TAGATTTTAATATCAGTCAATTTAGGAAACTCTGTGGCTCTGAATTATAGTTATAATTCTAGTTTTACTA TTACAGTGAAAGAAGAAGAGGCTGTTCATTATTATTATTGGAAGTAGTGTAGCATGTTTATTAAAGAGTG TCTCTGTGCCTCATTTTCATTTGTGAAGTAGGGGACGGTGTGTAGTTCCCACCTCACAGAGTGGTTGCAA ATCAAATGATTGAATCAGCATGTTTAAGTGGATATATCTCATTTGTGTCCAGATCATTTTAGTATATTCA TGACTCCTCACTTTAAAATTCAAATGATAATAGGTACAGTTAGTCCTCCATATCTGTGGATTCAACCAAG TAAAAATAAAAATTGCATCACAACAAGGCATGGTGGCTCACATCTGTAGTCCCAGCACTTTGGGAGGCT GAGGCGGGTGGACCGCTTGAGGCCAGGAGTTTGAGACCAGCCTGGCCAACATGACAAAAACCCATCTCTA CTAAAAATACAAAAATCAGCTGGGTGGTGGTGGCTTGCACTTGTAGTCCCAGCTACTCGGGAGGCTGAGG GATGAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAATGGGCCGACATCTCACCACTACACTCTAGCCC GAGCGCAGTGGCGCAATCTCGGCTCACTGCAAGCTCCGCCTCCCAGGTTCACGCCATTCTCCTGCCTCAG TCTGTACTGAACATGTACAGACATTCTTCCTTTTCATTATTCTCTAAACAACAGAGTACAACTATTTACA TTAAAGTGTACAGGAGGATGTGAATAGGTTAGATACAAGCACAATACCATTTTGTATCAAAGACTTGAGT ATTCATAAATTTTGGCATCTCTAGGAGGTTCTGACACCAGTCTCCCAGGGACGCTAGGGACGCCTGTATA TGGCTTAGATTCAGTGTGTTAGTGAAACCTGCTACACAGTAGCCTGTTTAGAGTTCCCCATTTTTAAAAA ${\tt TACTCTGCTCTTTTAAAATTCATTATACAGCCTTATTTCTCAGTACTGACTAAAATGTCTTATTTTTATA}$ TATCGAAGCTTTCTATTTATTTTTTAAACCAATGTATACATGTCAAATCCTAAAAATCGCCTGTATTAAT CTACTTAGTAACTTAATGCCACTCCAATGTGGATATAAATAGAACTTGCACATAGTTTTGAAACTACGTA GAAAGCATGGAGGCTGGGTGCGTAGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTAAGGTGGGCAG ATCACCTGAATTCAGGAGTTCGAGACCAGCCTGACCAATATGGCAAAACCCCGTCTCTACCAAAAATACA AAAATTAGCCTGGCATGGTGCACCTGTAGTGCCAGCTACTTGGGAGGCTGAGACAGGATAATTGC TTGAACCTGGGAGGCGGAGGTTACCGTGAGCCAACGTGGCACCACTGCACTCCAGCCTGGGTGAAAGAGC GAGGAAGTTTTTAATGTCTTTTTCTTACAGAGAACTAAAGCCTTTCAGCAGGAAATCCAGATGCTCACTA AGTGACTAGAGCAGCTGCATCATCTTTAAGAAGAAGGTGCTCAAGAATCATCCCAAGCTGAAGAAAAAAAG ATTAGACTTGGACAGGAAGAAGTAAGAATTTCCTGAAGTATAAGCATTCCTTTGATAATGAAAATGATT GCATTTTATTCATAACTTTAACTTTATCTAATGTTTGAAGCTGTTAATACTGTTAATACTTTTCTCCACA TTTTGAGAGAGAGTCTCGCTCTGTCACCAGACTGGAGTGCAGTGACGCTATCTTGGCTCACTGCAACCTC TGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGCACGCGCCACC CCTCTGATTTTATTTTTAAAAGCCTCTTCTCTCTCCGTATCTCCATGTCTCTTTTGTGTACTTATTTGAT GTTTGTTGTGAGGGCATCTGTTTACATATATCTCAATGTACTTTAAGGAGAGGATTAGAAGAAAAGGA GCTCAAAGGAATAACTCTCTTTTTTTCTTTTTTTCAGATGGAGTCTCACTCTGTCACCCAGGGTGGAGT GCAATGGTGTGATCTCGGCTCACTGCAACCTCCGCCTCCCAGGTTCAAGCGATTTTCCTGCCTCAGCCTC CCAAGTAGCTGGGATTACAGGTGCTCACCACCCGCCCGGCTAACTTTTGTATTTTTAGTAGAGACAAGGT TTCACCATGTTGGCCAGTCTGGTCTCAAACTCCTGACTGCAGGTGATCTGCCTTGCCTTGGCCTTCCAAAG TGCTGGGATTACATGTGTGAGCCACTGTGCCCGGCCAAAGGAATAACTCTCTAATGGGGAAATTTTAGGA ATTGTGACAGGCAGATATAATGAGCATTGATGAGGGGCCATTGATGATGTCTCTCAATAATCACTGTATA AGTCATTCTCTTCTCTCTCTCTCTCTCTCTCTGAATCTGTAAGGAAAAAGGCAGTCCTAAAAGTTGGATAG AAATAGGTAGGTTGCAATACAATTTATTTTCAGGAGATTCTCTATTTTACTACCTCTTCATAGAATTGCC TATCATAGCCGGGCACAGTGGCTCACACCTATAATCCTAGCATTTTGGGAGGCTGAGACAGGCGGATCAC GAGGTCAGGAGATTGAGACCATCCTGGCCAACATGGTGAAACTCTGTCTCTACTAAAAATACAATAATTA GCTGGATGTGGTGGCACACACCTATAATCCCAGCTACTCTGGAGGCTGAGGCAGGAGAATTGCTTGAACT CAGGAGGCAGAAATTGCAGTGAGCCAAGGTAGTGCCGCTACATTGCAGCCTGGTGACAGAGCAAGACTCC TTTTTTTCTGAGACTGAGTCTCACTCCATCACCCAGGCTGGAGTGCAGTGGCGCAATCTCGGCTCACTGC AACCTCCACCTCCCAGGTTCCAATGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTATAGGTGTGT GCCACCACCAGCTAATTTTTGCAGTTTTTAGTAGAGATGCAGGGTTTCACCATGTTGGCCAGGCTGG TCTTGAACTCCTGACCTCGTTATCTGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTATAGGCATGAGCCA TGGCTCACTGCAATCTCTGCCTCCCGAGCTCAAGCGATTCTCCTGCCTCAGTCTCCTGAGTAGCTGGGAT AGGCTGGTCTCGAACTCCCGACCTCAGATGACCAGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGG TGTGAGCCACCATGCCCGGCCTAATAGTTTTCTTTACTAGAGTTCTTGGGTTTTCTGGATTTCACTGTAT $\tt TTGCTCTGCCTCCCAGGCTGGAATGTGGTGTTACCATCACGATTCACTGTAGCCTCAACCTCCTAAGGCT$ CAAGTGCTCCTCTTGCCTCAGACTCCCGAGTAGCTGGGACCACAGGTGCACACCACTATGCCCAGCTAAT TTTTGTAGAAATGGGGTCTTTCCATGTTGCTCAGGCTGGTCTTGAACTCCTTGTGGCTCAAATGATCCGC CCATCTCTGCCTCCCAAAGTACTGGAATTACAGCCTTTATTTCTTTTAGATTTTCAATTTACTGCCCCTA AGTTGCAAAATGTTCTCTTAGAATTATTTTTATCTTTGCATTCTGTATCCATTCTGTATGCATATCTATA TATTCTGTATATTCCTCCTTTCTAATATTGTGTATTTTCACTTTCTCTCTTTTCCTTTTTAACCAGGCTTG $\tt CCTGAGGCATCTATTTTATCTTTCCAAAGAACCAGTGGTTCTTTTTGAGACAGGGTCTGGCTCTGTCTAT$ TGTCCAGGCTGGAGTGCAGTGGCGTGATTATGGCTCACTGAAGCCTCAACCTTCAGGGCTCCAGTGATCC ${\tt TCCTGCCTCAGCCTCCAGATAGCTGGAACTATAGGTGCACGCCTCCACGCCTGGCTAGCTTTTTGAAGT}$ TTTTGTAGAGATGAGGTTTCGCCATGTTGCCCAGGCTGGTCTCAAACTGCTGAGCTCAAGTGATTCTCCC GCCTCGGCCTCCCAAAGTGCTAGTATTACAGGCATGATTCACCGTGCCTGGCCAGTTCTTTTTTTAAAAT ATACGTTTTATGGCCTGGCACGCTGGCTCACCCTGTAATCCCAGCATTTTGGGAGGCTGAGGTGGGCAGA TCACTTGAGGTCAGGAATTCGAGACCAGCCTGACCAACGTGGTAAAAACCCTGTCTCTACTAAAAATGCAA AAGTTAACTGGGCATGGTGGTGCACCTCTAATCTCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACT TGAACCAGGGAGGTGGAGGTTGCATTGAGCTGAGATTGTGGCACTGCACTCCAGCCTGGGCAACAGAGCG ATGAATATATAGTATGTTTATTAAATCTGCACCCTACTTTCTCTTTTCCCTTCTTAAGTAAATGTGCT TTTTTTGTCTTTTTTTAAATCAGAAAAAGAGTAAGTACTATTGAATGTTCCTCTGTAGCTTGTCCAA TAGATTTTTATAAGAAATGTTTCTTTTCACTGTGTTCTATGTATTTTTGTAATTTTAGTGTTGATTTCCA $\tt CTCCTGCCTCAGCCTCCCTAGTAGCTGGGATTACAGGTGTGCACCACCATGCCCAGTGAATTTTTGTATT$ TTTAGTAGAGGTGGGGTTTCACCACCTTGGCCAGGCTGGTCTCGAATTCCTGACCTCAGGTGATCCCCAT GCCTCGACCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCACCCAGCCTAGAATTTTTTTAACCC TTTATACACACACACACACACACACACACACACTTTTCAAAATCAAATATACCAAGAGTCTTTTAT TGAAAAGGAGCAGCCCTCTTCTGTACCTCTCTTATTTCCCAGAGGGAACTCTTTAACTCTTTTAGCTGTT TCTGATAGTAACTTCCATTTTCCTAAACAATTTTAAACTGCCTTATCTCGAGTTATCTATATTAGACATG TTGTTGATTTCCTGTTATATGATAGATGAAATTTCATCTCTCATACCACTTTCCTACCTGCTCCTTTCAT $\tt CTTCCCAATCTGGTTATATTGATATTTTAAGCTAAATGCATAATCAGCATTTACTTTACCGTGATACTAA$ ACAGTTAATACCTTCCTTATATTTTCATACGTTTAATTTTCAGTGTTCATTTATCAAGGTTTTTTCCTG CCTAAATCTGTATCAGATGATCCTTTAGTCTTTAAAAATCTCCCATTTTTTCTCTCCCAAAGTCCTTCAT TACTGGAACACATCCTCCAATGGCTTCCTAAGAAATGGTGCCTTGGAGAGCGACATTTTTTGAGGTCCTT GTGTGAATGACAATGTCTTTTTTTGTTTGAATCATCATACTCAATTGATAGCTGGGTTTAGACTTTATTT ${\tt TCACACAGGACTTCATTGTCTTCTAATCTCTAGGGTTGTTATTGAGGAAAATATGCCATTCTGATTCTT}$ GTTCCTTAATATGTTATTTCTTGTAATGGATTAAAACATTTACCATAACTTTTTTGTAATAACATTTTAT AACTAATTTTTTTCTCATAATAAAATTAATTCAGCTGGGCATAGTGGCTCATGTCCGTAATTCCAGCACT TAGGGAGGCTGAGGTGGATAGCTGGAACCCAGGAATTTGAGATCAGCCTGGACAACATGGCAACAC CCCATCTCTACAAAAAATTTAAGAACTAGCCAGGCATGGTGCACACTTGTAGTCCCAGTTACTGGGGAGG CTTAGGTGGGAGGATGGGTTGAGCACGGGAGGTCGAGGCTGCAGTGTGCTGTGATTGCACCACTGCACTC CAGCCTGAGCGGCAGGGTGAGACCCTGTCTCAAAAAATTAAAAAATCATGTGTATTAGTGAAGATTTGTA AAGTAGAAAATAATAGAAATAAAATTGAAATCACCAGTAATCCCACCATTTTGCGATAACTAGTATTAAA TATAGGTATATTTCCCTCTGATTATTTTCCATGTATATTTTTATCATCATTGAGATGTACATAGTTTTTCC TCTAGGGAATAATCTATCATATAATAATTTTTCTTTTTTGACATTTGCATTGTTTCAGTTTTTTCTATTA TGAATAATGTTGTAAAGAATATCTTTGTGGGCCAGGTGCGGTGGCTCATGCCTGTAATCTCAGCAGTTTG GGAGGCCAAGGTGGGCGGATCACCTGAGGTCAGGAGTTTGCGATCAGCCTGGCCAACATGGTGAAACCCT GTCTCTACTAAAAATAAAAAATTAGCCAGGCATGGTGACAAGCGCCTGTAATTCCAGCTACTCGGGAAG CTGAGGCTGGGGAATCACTTGAACCTAGGAGGCGGAGATTGCATTTAGCCAAGATTATGCCATTGCACTC CAGCCTGGGCCACAAGAGCGAAACTCTCAGATATTCAAAAAGAATATCTGAATATCTTTATGGCCGGGTG CAGTGGCTCACCCTTGTAATACCAGCACCTTGGATGAGCAACGCAGGAGGATCACTTGAGCCCAGGAGAT ACTCCAGATGTTGAGATGGGAGGATCACTTGAGCCTGGGAGGTCAAGCCTTCAGTGAGCTGTGATAACGC TGTGTGAGTCTTTTTTTTTTCCCCGAGACGGAGTTTCGCTCTTTCGCCCAGGCTGGAGTGCAGTGGTGC AATCTCCGCTCACTGCAGCCTCCGCCTTCCGGTTTCAAGCGATTCTCTTGCCTCAGCCTCCTCAGTAGCT GGGATTACAGGCACCTGCCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGACCGGGTTTCATCATG TTGGCCATGGTCTCGATCTCCTGACCTCGTGATCTGCCTTCCTCAGCCTCCCAAAATGCTGGGATTACAG GCTTGAGCCACAGTGCCCGGCCCGTGTGTGAATCTTTATCCACATATTTGATTATTTCTTTATAATACAT TCCTAGAAAAGTTGAACTAATCTATGCTACTGCTTGGTGCTTATAAAATCTATTTCATTGTACTCTTGGT

AAAAATATTTTACTTATGGAAGTATTGTTAAGCCTGCAGTGTGTTAGTCTGGAGTGGATGTGGTATTATG $\tt CTAGTGTATAATAACATCTTAAAGCACAATTTTTTACTTCAATACTGTTGATTTCTGCAAAGGAAAACTC$ AGGGACTAAGCATTCCCAGATAGACAAGCATAGCAAGAAGTTCAAAAAGCTAGAGAAAGACAACATGCAA CAAAACAAATGTTATTGAATATTTGGCAGAATTTGCAGATTGCTACTACGCAAAGATTGGAGGAGAAAAT TCAGAAACTTCAGAAACAGCTCAGTGATTTGAAATTGTCAAATAAAAATATGAAAACTCAGCTGACAAGA GTAAATGTCCTTAAAGTAAAGGAAGTGAGGCTTTCAGAAATTCACTAAAGCTTTGGTCTTTTACCA ATATATATTTAAGCATATAGAATAAAATTGGAATTCACCACTCATTTTAAGAAACAAATATTACCAATAC AATTGAAACCCCCATATATCCATATATCCTCCTCCTTGTATTCTAAGTGTTATTATTACAAATCCCTTGT TTTTTGTTTTATTATTATTATTCTTTTTGAGACAGAGTCTTGCTCTGTTACCCAGACTGGAGTACAGTGG CGTGATCTTGGCTCACTGCAACCTCTGCCTTCCAGGTTCAAGTAATCCTCCCACCTCAGCCTCCCAAGTA GCTGGGAATACAGGCGCATGCCATGCCCAGTTAATTTTTGTATTTTTAGTAGAAACAGGGTTTCACC ATGTTGGCCAGGCTGGTCTCAAACTCCCGACCTCAAGTGATCTGCCTTGGCCTTGGCCTCCCAAAGTGCTGG AATAGTTAAAAGTTGTAGTCATTTTGGGGACTCTTCTTTGGACCTTCTCCATATCAAACTTCAGTTATAC TATTTCAAAAATTATGCCTTAAGCCAAACAGGCACTAAATAACTGATCAACTGATATGCCAGTTTATCAG CAATATTTCTCTTACTGAAATGCCAATTATCTTCTGTATTTCTGTATTTGATTAATGTAGGGCTTTAAGA CCTTTGAGGATGCAGAAAACATGTTAAGACTCTTTAAATCCCAAGTGGCCAGTTAATAAAAGTGCTAAGT AATAGTTATTGATGAGCACGATCATGGAGAAATGTCCTCTTAATTCAGAAATTTTGGAATGTTTTTCTTT TCCATATATCTCTGTCTTCATAAAAAAAGAAAGAAAGGAAAAGGAAAAGAAGCAAGAGTTATCATAACTGTTATT TAGAAGAGATCTAATCCTAGTTATTTCCTTCCTTTCCCCCATCTTATATGCTGTCACAGGACAAAACAAT TGAAGAGCTCAGGCAATCTTTAGCAAATGTTGAAAGGATGAAAGAGAAGGCAAATGTTGAAACGATGAAA GAGAAGGCAGTTGTGAAAACAGAAAACTTGAAAACTACATTAGACTCTGCAGAGCAAAAGGCAAGATCAG ACAAAGAGAAGACCCAGCAGATGTTAGATGCTGTCACTTCTGAGCCCCCAACAGCAAAAGAGCGCACCTGA AAACACCCACGCCTACTTAGACTGAACTAACTTGACAAAAGGGAATATTGGCTTATGGAATCATGAGTT AAACAACCTAACCTCCAGGTGGGCGGAGATACACCTGGGCCCCAGGATCAGCACCTGGAACCTACAAGCC GACAGGAAACATGATCACTGGCAACCATGGAGATTTATATGGAGTTTCTGTGACAGGAGAGAAATCCCA A GAAAAGGTCTTATTGACCCAGTTTAGGTCAAGTGCTTATCCCTGCTAAACCCACAGTGGCTAGGGATGGGATATATGATTATTTTATATACTCTAACAAGTGACCAGGAGTGTAGAGTTCTATGACATCATGTGTCATC ATGTGAAGCTCAGGGGAAACCATGTGTGTCACTTTCTGTGTCACTGTCTAGGAGAATATAGTAGTGCTTC TTAACTTGCTTAGATTTTCACTATACTTATAAAGCAAATATTTCGAGAGAATTTTTTAAAGGCCAACTGA TCATCTGGGGCAATTTTTAAATTATATGTCACTTCTCCATATATTAGTTGCTTATGAAACTTATACCTTA AGATATGCTTAAAACATAAAGTCATGATATTAGCATTTTCACTTTTTTCTCTCTTTTAACTTCTGTGTGTT CACTTTCTTGATTGTTTCTATTCCTCTCTTTTATTTTTTGAGACAGAGTCTCACTCTGTTGCCCAGGCTG GAGTGCAGTAGCATGCTCATGGCTCACTGCAGCCTCGACCTCCTGAGCTAAAGCAGTCCTCTCACTGCAG CCTTCCGAGTAGCTGGGGCTATAGGCGTGCCACCACCACCTAATTTTTGTATGTTTTGTAGAGACAGG GTTTCACCATGTTGCCCAGGCTGGTCTCAAACTCCTGGGCTCAAGCAATTCTCCTGCCTTGGCTTCCCAA TTTGGTCACCTTGTAGTTCACTCTTCACTTTTTAGATGATTTAGTGTTTTCTTGCCTGAGTTCAACTCTC ACATCTAGATATCTTGGACTATTCTGAATTATTACATTTCTGATTCAAAATAAAGTTTTTCCCCCCATTT TTGCAAATCCTTTAAAAATTGATATTTAATTTTTTTCAGGGGTGTTGTGTCAAATATTTGTCCTGTGTTT GCTGGAGTGCAATGGCATGATCTCGGCTCACTGCAACCTCCACCTACTGGGTTCAAGTAATTCTCCTGCC TCAACCTCCTGAGTAGCTGGGATTACAGGCAGTGCTACCATGCCCGGCTAATTTTTGTATTTTAGTAGA GATGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCCAACTTCCTTGGCC TCCCAAAGTGTTGGGATTACAGGTGTGAGCCACCATGCCCGGCCCATGGCTGTCTTTTGGGAGTATTTTT TTTTTCATCGCCTGAACAGTTTAGATGATAGTGTCTTTCTATTTTCTTCTTAAAGTAATTTTATGTGAAT ATAATTTGCCATTTGTCTGTATTCACTTTCAAATTCCTTGAATTGCTCTGGTCTTCAGATGTTTCTACTT TAGGGTAGCTGGAGGCAGGGCTTACTCACTAGGTTCCTTAGCTCAATACTACCCTCTTCTGTTGGCACAG TGAGTGCAGTTTCTAAAGTTTACTAGATCAAGCCTTTTTTGGGAGTGAGGGTTTATATGATGTCTGATTCT GTAATACTGTCTCATTTGTATAAACATATTAATTTCCACTGTTTGCTTTTTTCTTTTCCTTTATTACCAA GCCTCCAAGGAACACCACCTCCCCTCTCCCCTCAGAAACCTTGCCCTCTACAACTGCCATTTTTGGTC TCATGTGCTTCCAAGACCCTTGCTTTTCCTTCATTTGTCAGTGTTCTGATCCACCAGATCTCAGATTTGT TCTTGGTATTTCACCATTTATGATCTGTCTTGTTTCTGGGGGTAAGGTTGTCTGTGTTCTACACCAGTGA ATTGAAGTTTGTGGTATTCTCTAGTTTTGCTTTAGGCATGATTTATAGGTAGTTTTTATTTGATCTCCGT GTTGATCACTATGGTTTTTGGAGGATGGGTAGAAAAATGTGTTTTTTAGGGGACTGGTATTATCATTCAGC AAATCAGAAGTCCAAAACGTAATTACCTTATGGATGAAAAATAACAAAATAAGCAGCAATAAAATTAAGT TTACTCTATAAAAGTGTAAAAGCAAGAAAAATTTAAATGCAAAGGAAATTTTAAATAGAGTTATTGTAA TAGAAGAGACCATTTTTCTAGCTTAAAAATATTGTTTGAAAGTAGAATATATTACATTTAATAATGTTTA ATAAGACTAAATTTCTAGTACCAATTCTTTGTACATAATACCTGGGTGACCCAAACTAATAACATATCTT GATTTCTGTAATGGTTGTTTGTAGCTTAGTGACTTTCAAGAAACTATTCTCAGCTACTCAGGAGGCTGAG GTGGAGGTTGCAGTGAGCCAAGATCACTGCACTCCAGCCTGGGCGACAGAGTGAGACTCTGTCTCAAAAA ATAATAAATGAATAAAATTTAAAATTTAAAATAAAAATGGAAACTGCTCACCTTCCGAGGTAGTTTTAGA TGTACCCAAGATATCCTCTGTGGGAACAAGTCAGAATCTGGACAGGCCTGTGGGACTCGATGCCTGTTTT AGAGAGCTCTTCAGCATGGGCGGGGTGAGATTATACTGGACCTTACAGAAGTACCATTTTGGAACAAAAT AATTATCTTGAATATTCATTCAAGGGATAAATGAGAATCACTTTCCAAATGGCCACAGCCATGATTCCCA AACTGTGTGCCAAGGCACACTGGTGCACTGTAAGGATCTCAGCATGCCATGGAATGTTTTGATTTTATTT ATATATTTATTGAGATGGAGTCTTGCTGTGTCACCCAGGCTGGAGTGCAGTGACGTAATCTCGGCTCACT GCAACCTCCGTCTCCCAGGTTCAAGCAATTCTCCTGTCTCAGCCTCCTGAGTAGCTGGGACTACAGGGGC CTCGAACTCCTGACCTCCGGTGATCCACCCACTTCAGCCTCCCAAAGTGTTGTGATTATAGGCATAAGCC ACCGTGCCCAGCCTAAATATTTTGATTTTAAAGGGAAGCACTGTAATATTTGACATCTGTCAGGAAGGTA CATGGATACTAGCTTCAACATTACATCACCCTTCATTCTTTTTGATGACATACCTTTGTGATAGAAACTG GAAGCTGTGCTGCAAACTTGGGGAAGGAGGCTCTTTCCCCAGATTCTAGGATCCCTGGCTGCAATGTAAG AAACTTGCTTATCCTTCCTCTCAATAATATCACCAGCCTAGCAAAAGAGGAAAAGTGAGGGACACCTTGA CCAGAGCCTCCACTTGCAGCCCAGCCTGCTCAAGCTGTAAGAACCACCTTCTTATTCAGAATTTCCCCAG AGCCACGGCCCAAGGGTCATCTGCCTGCTGCAGCCTTAGCACACAGGAGCCTGGGCATGAAACAGGCAGA CCCTCTCCTCCTTCCAGGACACCCTTCTCTCAGGAAATGGAGGCCCTACCAGCTCCTACAGCCAAGCTCT CCATGAAGGCCAAGGTGTTAAGGTGGGCCAGTTTCTGAAAGAGCCACTTTCTGAGCATATTAAAGAAAAA ${\tt TCTCTTGTAAAAACAAAGAGGGCTTAGTGTTAATGCTCCTTTATGAATTGTGTTAGTAGGAACTGATTGT}$ TCAATCATGGGGCAGTGCAAAACGTTAGCTGTGTTAACTCTGAGCAAACAGGGGAGATCCTTCAAGGACC TGGAACACTGTTTCCTAGAAAAGCTTTTAATCATGTGTCCAAATCACTGCCACACTCTTCTTTAATGATA AGAATTGGATTTAGATTTAAGGCTTTAGATAAATGATTCTCAACCTTCAAGATGCTATGAAATGACCTAA TTAAGGAATTATTTTTCCTAGGCCTATCCAGAGATTCCAGTTCAGTTTGTGGTATGAGGCTGAAGTATG GATATTTTTTCAAAGCTCCTTAAGTATATAAATTGATAAAATTACTTTGGAAGACTGGCAGTGTACGAG TTTTCTGTTGCTGCTGTAACAAATTATCATAAACTTTGTGGCTAAAACAGTACAAATTTATTATCTTACA TAAAACTAGTAGGAATTGATCAGGCCCATCCAGTCTTTCTCACAGCTACTGTTCTCTGGTTCTTTATCTG ATTCTACAATTTCTCTGATTCTCCTTCTCTTGCCTCCTCTTCTCTATTTTTAAGGGTGCTTGTGATTAA GTTGGGCCCACCTGGACAATCCAGAATGCTCTCCCTATTTTAAGGCCACCTCTTGGCAAACTCTGTAAAC TTAATTCTCTTTTGCCATGTAACCTAATATACTCATAGGTTCCAGGGATTAGGACAAGGATATTTTGGGG GTCCCACTTCTACATACATGTTAGAAGCAAATTTTTCAGTGCCACAAAATAAAAGAAAATAGCACTCGAA TATAAATTTTCTCAGCAAGGCAAATTTACTCTTTCAGGAGGGTGCCCCTCGTAGGTCTGGTTGCCACGAG AGGACGCACAAACAAAGGAAAGCAGGGGGTTTTATTATCTCTAATGCAGCTTGTCCCTGTTACTGCGTCT TGCCTCCATTGGCTGGAGTTGGACCACACGATCTAAGCTGAACCTGGTTGGCTAACTTGAAAAGTGCAGG TAGACAAAGAACAGAAATAAGACTTCAGGACAGACAGTACAAGGAAGTAAAGACCTCTTGGAGAAGAA TACCTTGTTTGTAACAAAGTGAAACTCTTTGAAGAGGAACTGTCTAAACTACTTGTTTTTAACATATATA $\tt TTGTTGCCCAGGCTGGAGTGTAATGGCACGATCTTGGCTTACTGCAACCTCTGCCCCCTGGGTTCAAGTG$ ATTCTCCTGCCTCAGCCTCCAGAGTAGCTGGTATTACAGGCATGCGCCACCACACCTGGCTTATTTTTTG TATTTTTAGTAGAGACAGGGTTTCTCCATGCTGGTCCGGCTGATTTCTCGAACTCCCGAACTCAGGTGAT CTGCCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGACGTGAGCTACCTCGCCTGGCCAGAAATGTGTG CATATTCTATACAAAGACATTTACAATATTACTAACGGTGGCATTGTTCATTATTGCCGGAAACTGGAAA CTACCCAAATGAACAATGGTGGCTTAAGTATGGCAATCAGATCCATTAGTTAAGCATTCGATCTCATTTG GGGTTGGACAGGGAGAGGTCAACTGGAGTGCTGAATTTTTCTGAGGCCAAACTAGAAAGTAACTCTAGGA GCTGGGCGTGGTGGCTCATGCCTGTTAATCCCAGCACTTTGGGAGGCCAAGGCGGGCAGATCACCTGAGG TCGGGAGTTGGAGACCAGCCTGACCAACATGGAGAAACCCCGTCTCTACTAAAAATACAAAATTAGCCAG GCGTGGTGGCGCATGCCTGTAAATCTCAGCAACCTGGGAAGCTGAGGCAGGAGAATCGCTTGAACCTGGG AAATAGGGGAGAGCATGGAGTTCCACTAATAAAATGGTAATACACTAACAGTGGAGAAAGCAATGGGCTT GTAAGGAGAACTTGGTTCTTGTTGAACATCCGTCACTAATCAGTCTTGCAACCCTTGATCAAGTCTTGTC GGGTTTCAGGCAGCCACAAGTAGGCTGGCAGAAATGTTTTCTGGTCAAATAAAGGAGTCTGTTGCCCCAG AACAGGAGCCAGGGGCACAGCCAACAGTAAAATTCTGCTTGGGGCCCCATTCCTCAGCTGCAAGGTACTT GTCTTCAGGTGTGGCAGGCTGAGATCTGCCTCCTTGTTCCCGGCCTATCCCGCTGGGCCCCTCCCCTGCA AGTGTTCGCTTCCATACAGAGGGACCATTAGGGCCTGTACATCGTACTTCAGGTCCCCTCCTGTGGTCCA ACATTCCCTAGGGGCAAGTGCAACTGTTTATGCGGAGACCACTTTTCCGTGCAGCCCAACTGAAGGTGCA CGTTCCACCGCAACCTGGTGCTTACAACAGCTCGGGAGGCCGCGCTACCGCGCCTGCGCCCCTCTGAATA AGGGAGTTGCTGCTACACTGCCGGCCGGAGAGGACAAGGAAAACGTGGAGGAAGTCGGTGATGACTG GCTGAAGGGGATGATTGGCGGGTGAAAAGAGCCCGGGCCAGAAAGCACCTTTGCATGTGGCTAGAAACCCG CCTGAAGAGGGGCTGAAACCCACGCCGGAACCCGCCCGATTCGAGCCAATCAGGGAGAGGAGCCGGGTGG AGGGGGACGGGGCGCCTCGCGGGAGGGACAGTTTCGCGGGTTCGGGCCGAGTCTCCCGGATGCT CCTCAGCTCTGGGGACGCGGTGCAGAAGTGTGAGGGCGCCCGGCTTCCAGGCAGTAATGGGCGGGTCCCT GCGCGGGAGCGTGGCGGGCGCTGGACTCTACAGCAGATGTGGAACTGGAGAGCTTGGCGCGCCTTCCGAC TTTGTCACACACCTGCGCCGCCAGACTGGGGTCGGGCCCCTCCGCGTTCTGCTCTGGAGTGCCTGGGTCT GGGCCCAGCACCGCGCTTTTAGAATCTCCTCAGCTGAATCTGACGCTCAGCAGTGGGTGAAGCGCAGCCC CCTGTTTCAGGCCCTGCCGAGCTGGAAGGAGTGTCAGAGCTGGAGCGCGCGTGGCCCCCTCTGTGTTGGG GTCACCCGGGGTTGCCAGGGCTCAGGGAGGGTCGTAGTCTGGATTTTGTCACCCGCACGTCCCCACCCC CCAGCAGGTCTGGGGGTTGGAGAATCCACGCGGGCTTCATAAGCTAGATGCCAGTTAACTGTCGAGAGGGG ACGCTCCTCCTCGTAGGCGTCCACACTGGAGAAGGAATAAGATGGGCGATTGCCTGGGAAGCCTGACAG GGCGGCGGCAGCTGGGATGCTGGAGAGGACTGGCCCCTTGAGTTACTGAGTCCCATGAATGTGCTTCCTC TGCTGGAGGAACCGCGCTCAGGTTACAGTCATCCCAATATGGTTCTGAAGGTGCGTGGTTCAGGTCACTT AAGTATAATGTACATACCATAACGTTCACCCATTTTAATGGATTCAATGATTTTTAGCATATTTACAGAG CTCAAAGTTTGCACAAGCGGATATTTTAGAGGTACAGTGTAATATAAGAGCTTCTGAAAATGTCCACTTA AGTTGTTTTATACCTGAGCAAGTGAAATTAAGAAGGGAATTGAAGCAAATATTCCTGGTAAGTTGTAGGG AGTGAAACTTTTGTGTCTTGTAATACCAAGTAGATATTGACCATTTCAACTGGTTTTTATGCTGAGGAAA TGCATAAACCCCATTTTACAGATGATGAAATCGACTTTGAAGGATAAGTTGCCTACAGCTGCATACCTGT GCCTGGGCTAGGCCCCAAACCCAGATGCTTTATCTCTCAATTTGTTACCCTTGCTACCTCAACAGCTTGG GCCACTCTGTGCCAAGAACACTGCTATAGGTGCTAGAGATATTATTGAATCAGATACCGTAGTGAACTGT TCCTGCCCTCAGCTCATCTTCTGGTGGGGAGGACAATGATCAAGTAAAGAAATATATAGTTTTAGAGATT ATCTGAATGAAGAGGGAAGTTAGGATATAAGAAAGAAAGCAAGGGTTTGATTTGAGCAAGCGCAAAAAT AGAGTTGTGATTTACTGAATTGAAATAAGGTGATACTGGAAGGACCAGGTTTTGGGGGGTACAATCATAAG TTTGGCTTTAAATGTTTTTAAATACCTTGCCTCTTAGACATCCAAGTGGAGATATGGCATTTAAATTCAT GAGATTGGATGAGATCCCACCAAAGGAACAGGTTTAGGTGGAGACAACCAAATACCGATGCCTAGGACAC TGCAGTGTTTAGAATTCAAGGAGATGAGAAGGAAACAGGAGGGAAGATTGAAAAGAAGAGTCCAGTGTGT AATTAACTGTTAAATGTTACAGACTGATCAAATAAAATGAAGACTGAGAATGGCCTGTTTGTAAGGTAAT AAAAATACATAAAATCTTATGATAGAAATATTTATACATAAAGTTAGTAAGGAAACAGTGTTTACTCCTT TTTGTAGAAGTGTAAATTTTTACAACCATTTTGAAGGGCAGTTTGATATTATCTACAACTTAAAATTGTG CTTCCATTGATAATTTCACCTGTGGAAGTTTATCCTACAAAAATATTAATATGTGCACACAAATATGTGT AAAAGTGTTTATCACAGCTTGTACACATATATATTTATAAATGTGTTGTCCAGGAACAGTGGCTTATGCC CACACACACAAATTAGCTGGGCGTGGTGGCGGACGCCTGTAATCCCAGCTACTTGGAAGGCTGAGGCA GGAGAATCACTTGAACCCGGGAGGTGGAGGTTGCAGTAAGCCGAGATCACGCCACTGTACTTCTAGCCTG ACATTTGTAAAAAGGTACAAGTTTTCATCAAGATGGATGCAGTTGTTAAAGGGAAGATATAAATGTGTAG ATATGGGACATAGCTGCTATAGACGGAATTGTGTCCCCTGAACTTTCATATGTTGAAGCCCTTACCCTGA ATGTGGTGGTATTTGGAGGCAGGCCTTTGGGAGGTAGTTTGATTTAGATGAGGTCACGCAGATGGGGCC GGACATGGTGAGAAGGCAGCCATCTGTAAATTAGGAAGAGTCCTCACCAGGAACTGAACTGGCTGTCACC TTGATCTTGGTCTTTCCAGGTTCCACAGCCATGAGATATGAATGTCTGTTTTTAAAGCCACTCAGTCTGT GGTATTAATATTTTGTTATAGCAGCCCAAGTTAAGACAGATAGCTTTGTTAAATGATAAAGTCAGGTTAT CTAATAGAATGCATAGTATAACCCCATTTATCTTAATGTATCACAGGAGGCCTTTCTAGTCACACTAACA AAAGTTACTCCTTTGTGTGCCTTCCCTGATCACTGTTACATTATTCTATGTACAGCACTTATTATCTAAA ATTATTTCATTAATTTTTATACATGTTTACTGGCTTGTCACAATAGAAGGTAAGCTCTGTAAGGGGTTTG TTTAGGAAAAAACCCTACACAAACAGTATTCCTGTAGTGGTTTTTAAAATAAGACAACAGGCTGGGCGTGG AGACCAGCTTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAGTTAGCCTGGCCTGGCGTC A CACGCCTTTAATCTGAGCTACTTGGGAGGCCAAGGCAGGAGAATCACTTGAACCCAGGAGGCAGAAGTTGCTGGATTTAGTGACTTGCTTCTATGTGTAGAATATGGCCAATGTGGAGGTATGTCAATAGGTCATGAAT TCCTTTTTGTTCTCTCTCTCGATCATTCACTCTGAAGTAAAGCAGCTGCCTTGTCATGAGAACATATCA AACAGTGCTGTGGAAAGGCACATTTGGTGAGAAATAGGCCTACTCCCAACAGCCAGGGAAGAACTGAAGC CTTCTGTGACATGTGAATGAGCCACCTGAGAAATGTATTTTTCATCCTCAGTCAATCAGTGTCTCAAAAAG ${ t AGGCCGTTAGCTGGATCCCTCAACAAAGCCACTTTTGGGTTCCTTTCAGATAATACAGGTTTGCTTTGTA$ ATCTACTAGGTTTGGTGGTAGAGTGAGAAGACTGAACACTCCCCTTTAGGACACATCATAAAGCAAAA CAAGTATGGCCCAAAGTAGCATACACTTAATGTTCTTTTCTACTAGGATTTACAGAATTCATTGTTGGTA CAATTTACTCTTTTAAAAAATAATTTTTATGTTGATCAGAATAAAATACGGTATTCCAAGCTATATGTGC TAACTTGATTTTATTTTAAAAATGTATTGAACACTGGAACACACAGATTTGAAAGATTTGACCTTAATAT TGCCTTCTATTTAGGTAAAGAATCTTCAAAACAAACTTCTCATATGATATGGTTTGTCTGTGTCCCCACC GAATCATGGGGGGTGGTTTCCTCCTGTTGTTCTCGTCGTAGTGAATAAGTCTCATGGGATGGTTTTATT AGTCTTGGGCATGTCTTTATCAGCAGTGTGAAAATGGACTAATACATCATAAAAGAAATTTCATTGCAAA AGTTGAAGTCTGAACTAAAAAGCTACAAAGAAAATAATGTTTAATAGCCATCCCAGATAGTGTCCCTGAA ATACGATGTCAAGGATCTAGAGGAACATATTGTATCTTTAACCAGAATTAAGTCTGAAAAACAAGTATTC AGAGTCTTAAAAGAGGCAAGCAGGACTTAACGGAACGAATTATAAAACTAAGGTAGAAAATTCTAGTTTA TAATTTCATGGAATTTCACTTATTGCCTGGTATAACATTATTACAATTTTTCATTATAAGACTTGTGATT ATCAAGGTCAGGATATCAAGACCAACCTGGCTAACACGGTGAAACCCCATCTCTACTAAAAAAATACAAAA AATTAGCTGGGCGTGGTGGTGGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGACAATGGCGT GAACCCAGGAGGCAGAGCTTGCAGTGAGCTGAGATCGCGCCACTGCCCTACCCTCCAGCCTGGGCGACAG TGTTTGATCATATACGGTACCCTTTTTTTTTTTTTTTTGAGATGGAGTCTCACTCTGTCCCCCAGGCTGGAG TGCAGTGGTGCGATCTCCGCTCACTGCAAGCTCCGCCTCCTGGGTTCATGTCATTCTCCTGCCTTAGCCT CCCGAGTAGCTGGGACTACAGGTGCCCACCAGCACCTGGCTAATTTTTTGTGTTTTTAGTAGAGATGG GTGCTGGGATTACAGGCGTGAGCCACCGTGCCTGGTTACAGTACCCTTTTTGATAGCAGGAGAAAAGATG GTCATTAATGTATCCTCTTATAATAAGAGTAATATTTAAGAAAGCCACAAAATATGAAAAGCTTTTCTAT CCAGATTTACATTCTGTTGTAGACCATCTTTATTCTGTTATTTACTGTACGTTAGACCAATTGATACCTT TCATTTTCCTCTGGGGTTTGCATTTCGCAGATCACTTTTAAAAGGAAAACATAGGAGCCTGAAACAGAAG TGGGAAACAAATATTTACTCAAACTAAGAGACTAAACTCAGTAGCCAGCAACAAGAGATCAAGGTGTGTG TGTGTTTTCTGGTTGTGCAGATATTGTCTGAAATAAGATGGCTGAAAAGTTCAAGTGAAAAAGTAATTAA AAGCAATTCATCAACCATAGCCATAGCTGGATGTATAATAGCTGATCAGGCATAGCAAACTCTTCAGGAT AATTTCATTTTTAAAAATTTATGTCTTTGTCCTTTTCATCTTCTAAGCACAGTTTCAAATAAGACTACAG AGTGAGGCTCTAGGGACCATCAGTTTTTGTCTTTAGTGCTAAAATGGTGGCTGAGTGACACCACCATGATT TTTTTTCTCAATATTTCATCATTCTACCAGTGTTGGAAAAGGGAGAGAAGGACTCTCTGAAGGAGACTGT ${\tt GCAAAGGATTCTTCTTTTTTTTTTTTTTTTTGAGATGGAGTCTCACTCTGTTGCCCGGGCTGGAGTGC}$ AATGGCATGATCTCGGCTCATGCAACCTCCACCTCCTGGTTCAAGGGATTCTCTTGCCTTAGCCTCTTT AGTAGCTGGGATTACAGGCGCGCCACCACGCTCGGCTAATTTCTTGTATTTTTAGTAGAGAAAGGATGTC ACCATGTTGGTCAGGCCAGTCTCGAACTCCTGACCTCGTGATCTGCCCACCTCGGCCTCCGAAAGTGCTG GGATTACCAGCGTGAGCCACTGGGCCCGGCCCCAAAGGATCTTTTTACACCATGTCTGGTTCCCAGCCCT ATCAACATTTATTTTTAACTTTGAAGCTATTTGCATACAAATTGAGGATTTTTATCTTTCTATTGAATT GCCCCTTTTATCGTTATGAAATCTCACTTATTTCATGTAATACTTTTTGCCCTATAGTCTAGGTTGTCTG $\tt TTCTATGTGATTAAAGTATGTCTTTTGTAAACAGCATATAGTTTTGTTTTTAATCTAGTCTTATAATCT$ TTGTCTTTTAATTGGAATGTTTAGGCTATTTACATTAAATTCTGATATTGTTGGATTTAAGTCCACCATA TGATTTTTTTTTTTTTTTTGTCAAGATGGAGTCCTCCTCTGTCACCCAGGCTGGAACGCAGTGGTATGATC TCGGCTAACTGCAACCTCAGCCTGCCAGGTTCAAGCAATTCTTCTGCCTCAGCCTCCCGAGTAGCTGGGA TTACAGGTGCCTGCTGCCATGATGATTAATTTTATGTGTTAACTTAGCTGGGCTGTGTTGCCCAGATAGT TGGTTAAACATTATTCTGGATGTTTCTGTGAAGATGTTTTTGGATGAGGTTAACATTTAGATCGGTGGAC TTTGAGTAAAGCAGATTACCTTTCATAATTTGGGTGGGGCTCATCCAATCAGTTGAACATCTGAAGAGAC TGCGATCTCAGCTCACCGTAACCTCTGCCTCCCAGGTTCAAGTGATTCTTCTGCCTCAGCCTCCTGAGTA GCTGGGATTACAGGCATGTGCCACCACGCCTGGCTACTTTTGTATTTTTAGTAGAGATGGGGTTTCTCCA TATTGGTCAGGCTGGTCTCAAATTCCCAAACTCAGGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTGGG TTGCTCTTTTTGACCAGAAAGGAGTGCAATGTGGCAGGATGTTGGCTCACTGCAACCTCCACCTCCTGGC CTCTCTAGTAGCTGGGATTACAGGCGCCTGCCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGATG GGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGAAATTACGTGATCTGCCCGCCTTGGCCTCCC AAAGTGCTGGGATTACAGGCGTGAGCCACCATGCCTAGCCGGGTAGTTTATCTTGACTTGACTTCAGGCT CACCAATCCTTTTGGCTGCAATTCTACGATAGAAAAGGACATAAAAAACTTTAAATTAGCCTTAGAATAA AGAGATGTTATCATTCCCTAGCAATTAGTATTCAAAGCAAGATCCAAATATGTAATTAGTCATTTATGTA GATAGAGGCAGGGTTTCACGACATTGCCCAGGCTGGTCTTGAGCTCAAGTGATCCATCTGCCTTGGCCTC CCAAAGTGCTGAGATTACAGGCATGAGCCACAGTGCCTGGCCCAAATTATTGTAGTTATTTCCAATTCCT TTCCCCCTTCTCACATCCCAATTAAAGAATTCCACTCAGGAATTGTTGTAGTAGAAGTGCTTTAGTCTGT GTGCTACGGTTTGGATACTGTTTGTTTGCCAAGTCTCATGTTGGAATTTGATCACTAATGTTGAAGGTGG GTAAGTTCGTTCTCACTCTTGGTTCCCACAAGATCTCGTTGTTGTAAAGATCCTTGTACTTACCCCTCCT $\tt CTCTCTTTTCCTTTCACCATGTGATCTACACACACAGTATCATAAGGCATCTTTCTGATCCTTT$ CTAATACTAAAGGGGTTACTTTATTTTATTTAAATTTTATTTTAAATAAGAATTTAAAATATATCTGCAAC TAATATCAGAGCCAAGGGGCTACTTTCTTTGAAATACAAAGAGTCTTTAGAGTCAGACTGTGTATGTTTC AATCTGGGATCTACCTCTTATATTGTAGGTTTAGACAAATTGCTAAATATTTCTTGTCCCAGTTTTCTCA TCTACAAAATGGAAAAATTAGCTTCCCTTTGCTGTCTGCCTTGAGTAGAAGCTTCCTGAGGCCCTCATCC AAAACAGATGTTGGTGCCATGCTTCTAGTACAGTCTGCAGAACTGTGAGCCAAATAAACCTCTTTTCTTT ATAAATTACTCAGCCTCAAGTATTCCCTTATAGCAACACAAATGGACTGAGATACCGTGTGTGATGTCCT AATCCTTATAATATTATCCTACTACCCAGGCAGATATTGCTCTCCAAATGTCTTCTTAAAAAGGATGGTT TTTTGAGACAGGGTCTTGCTCTGTCGCCCATGCTGGAGTGCAGTGGTGCAATTTCAGCTCACTGCAACCT TCTCGTTGTGTCACCCAAGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACCTCCACCTCCCAGGT TCAAGTGATTCTCCTGCCTCAGCCTCCTGAGTAACTGGGACTACAGGTGCACACCACTATGCCTGGCTAA TTTTTTTTTTTTTTTTTTTTTTTTTTTAGTAGAGACAGGTTTCACCATGTTAGCCAGGCTGGTCTCA AACTCCTGATCTCAGGAGATCCACCCGCTTTGCCCTTCCAAAGTGCTGGGATTATAGGCTTGAGCCACTG GGAGGCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTGGTGTGATCTCAGCTCACTGCAACCTCTGCCTCCT CATTATCTTGGCTCACTGCAACCTCCGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCAGTCTCCCGAGTA ATGTTGGCCAGGCTGGTCTCGAATTCCTGAGCTCAGGTGATTCACCTGCCTCAGCCTCCCAAAGTGCTGG TTTGGAATGGACATTTGAAAATTGTTTGAATTACTTTAGTCTACTCATATCTTTCAGTCTATTGACACAA AGATTCACTCCCATATGAATATGAAAGGACAAGGAACCATGAATATTTTCATGATGAAGGTGAGAATAAG TTTTGATTGATTTTTGAAGAAAAACAATTTTTGTTATCTTGTTTAACTCTAGGAGGTAATCGAGAAATGT TGAGTTGTTTGTTGGTTCTCCCCAAAGGGAGGGTAGAAGGCAAGCCATGGTTCCTTTATACCGTGGTTGA TGAAGAGAAAGGTATAGGGGTAATAGGGCTGTGAGAAAGCTGAAAGCTGAGATCATGTTACAGAATAAGA TAGCGGAGTTTCATATTTCTGGTATGGGGCAATTCCTGCTGATGACAAAATCCAGGGTTGTTTTTGGATC TAGGTGTAGGTGGTTGAAGTAGGGTATAAAGGCAGTCATGTGCTGGTAAACTGGCTCTTGAGAAAAAGCA CCCAATTTGAGCATTCATTGACTTTTGATACCAACATGTCATTGAGCATAGAATTAGAAAGAGATATGAA ATTAATATTAGAATAATAAATAAATAATAAATAAATGAGTGTAGGGCATTGGAATTAAGTACAC ACATGAATCACAAAGCTGTATTATTGGATCGATCATCTACTGTGACCCCTGAAATCTTGAATTATGGTAT GAGTTGGTATAGAAGAAGAATGTGAGGCCCCAAATCTTCATTGAGTGAAGGAGGGTTGAGGAGTAGTCAG TAGAAAAGAATAAAAAGAGAAGATTTTATAGAAGTCTGTTGGGGGTAAAATATTGCTGAGGAAGTAAAAT AGGGTCTACATGATCCAATTTATGTGTTGGCTCCATTTATAAAAGAATATTTCAGTTGTCAAAACTAGTT TGTGTATAATTGTTGACTCCTCCCAAACTTAACTACTAATAACCTGTTGTTGACTGGAAGACTTACCAGT TAGAGAAAAGAAAATGTTATTAAGAAAATCATAAAGAAGAAAAAATATATTTACTAATCATTAAGTGGAA AGGGGTTGGTCTTGCTGTCTCCGGGGTAGCAGAAGTAGAAGAAAATCCACGTTATCAGTGGACCCATGCA ATTCAACTCGGTCTTCAAGGGTCAACTGTAATTCCAATCTTAATTATTTGCCTTAACTAATTTTCTTAAT AAAAGGTGGAATATTCATAATTTACAATAACACCTTCATTTTCTTAACTTTTCTCACTATATCTCTCACA TCACATCCTAAACCTTTTTCTCCTGTGCCTAACTCTCCATTCTCTTAAAAAACTCTCCCAGATCCAGTCT GATCCCAGAGCTGCATAAAAGGACAGGAGATCTTGGATGATGTGTGGGTTGGAAACAGAAGGTATTACAT TCTTTTGTTAAATAATTGAGGATTTTGCATGTGGTTAAAATGATGTCAGAGCTAGGCAAGGAAACGGGAT TCTCCTACATTCCTGATAGGAGATTAAATTGGTACAACCCATTTGGAAATGCATTTGTCAATATCTCCTA AAACCAAAGTGTATCCCTAAAACCAGAATATATCCTACCCTGTGACTCAGCAATTCCACTCCATCAACAG TGGAATGTAATGAATATGGCTATCAGGTTTCAATATGCTAGTGACATCTGCTACATCTATTAACAGAAGT CTATAATTTTTTAACCTCTGATCTCTGAAAACTTATTTTATGACTTTATTACTCTACAAACTAAAATGTC TTACTATTGTGTATCAGATCCACTTCTTTTAAATTAATTTTTAAATGTCAAGTCTTAATAGTCTTCCTT TAGCCTCTATTTACTAATTTATTGTCCCCACAATGTCACTCTAAACGTAACTGTTAACTATCAGGAAGTA TTTCCTTCTTTTTCTATAGAGAACAGAAGATCTTCAGCAGGAAATTCAGATGCTTACTCAGCAAATGGAA CAGCTGTATCATCTTTATGAACAGCTGTTTGTGAATCATTCCAACTTGAAGAAAAGTATAGGGAACAACA AAAGATCCTTGAAATACCTGGAAGGAAAAATTGCTTTTAATGATGTTTTAAAAGATTAGACTATGAAAAA TTTAACTTTATTTGGTGTAGAAAGCTGATAAAAACTATTTATATTTCACTTAACATTGGAAAAGTGAGGG GGAAAAATCCTTAGAGTTATGCTTCTAATTTTATCAAAAAACATGCCCTTTCCCATATCTTCAGTTTTTT CACCGTGTACATATTTGACAGATAAAACCATCAATATAATATGGAAAGTTTAGTGTCTTTTATAATCTCT TCTTGTAAGTTACATAACATCACTTCTGCCATATTCTATCAGTCAAACAGACCAACCTGATACAATGTTG TTCGAGACTATAAGGGTACCAGGCGGCGCGGTGCAGATCATTGGTGGTCATCTTAAAAGTCTGGCTACCG AGGCTGAGGTGGGCTGATCACCTGAGGTCGGGAGTTCAAGACCAGCCTGGCCAACATGGAGAAACCCTGT CTCTACTAAAAACACAAAAATTAGCCAGGTGTAGTGGCTCACATTTGTAATCCCAACTACTTGGGAGGTT GAAGCAGGAGAATCGATTGAACCTGGGAAGTGGAGGTTGCAGTGAGCTGAGATCGTGCCACTGCACTCCA CAGTAGACCATATAGAGTTTAAAGATAAATATATCATCTCATCTAGCCTCCACCTCTGCCTTTGAATATG TGTATGGAAATAATACATTGAATGGTTAATCCATGCAAATAAAAATAATCCTTTATTAAGTTTTCTTAAG ATTGTACAAAACGTGTGCCTTGGCCAGGCATGGTGGCTCACACCTGTAATCTCAACACTCTGTGAGGCCGA GGTGGGATCACTCGAGGTCAGGAGTTTTAAGACCAGCCTGGCCAACATGGTGAAGCTCTGTCTCTACTAA AAACACAAAAATTACCTGGGCACGGTAGCACATGCCTGTGGTCCCAGCTACCTGGGAGGCTGAGGTGGGA GAATCATTTGAAACTGGGAGGCAGAGGTTGCAGTGAGCCAAGATTGCACCACTGCACTCCAGCCTGGGCA CATTCCCATAGTTATGGAAATATGTAAACATATATAAAGGGTAATGGTGTCTTCACAAAACTAAGATCAT TCTAATAAAAATATTCTGCAACTTCCTCTACTTAGTAGTGCCTCATGGTTGTATCTTAAGTTAAAAGATA TAGCTCTTCCTTTAATAACTGTATAATATTCTATAGTATGCATGTATCTTAATTTATTCAACCATTTCTC TTTTGAGGGATGATATATTATTTCCTTCTTTTGGTCACTACAAATAATGTGAAAATAAGTATCTTTCAA CTTATATCCTTCCACACTGGTGCTTTTGTTGCTAGGGGATTAATTGACAAATATGAGCTGATAGGGTCAC AGTGCGTATTTTAAATTCTAATAGCCATTGTCAGATTACTATTTGCAAAAGGATAGAAGCAGTTCATTTA AAAAAAAGAAACAAAAAACAAGGTACCTCATTATTATTGTAATTTACATTTTCTTGACTACTAGTGAAGA TAAGGATCTTTTTTTTTTTTTTTTTTTCCTTTCTGTGGAGATAAGGTCTTACTATGTTACCCAGACTGGT CTCAAACCCCTGGATCAAGCTATCCTCCTTTCTCAGCCTCCCAAAGGGCTGAAATTACAGGTGTGAGTCA TTGCACTTAGCCAGTAAGCATCCCTCTTCTTTAAAAAAATAATTTCAGGCCAGGTGCAGTGGCACATGCC TGTAATCCCAGCACTTTGGGAGGTCAAGGTGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGG CCAAGATGGCAAAACCCTGTCTCTACCAAAAATACAAAAATTAGCTGGGCATGGTGGTGGTACCTGTAA TCCCAGCTACTCGGGAGCATGAGGCAGGAGAATGGCTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCTGA GATCATGCTATTGCACTCCAGCCTGGGTGACAAGAGCAAAACTCTGTCTCAAATAATAATAATAATAATT TTTATTTTATTATAGATTAAGGGGTACATGTGCAGGTTTGTTACATGGGCATAATGCGTGATGCTGAGG TTTGGGTTACGTCACCAGGTAATGAGCTTAGTACCCAATAGGTGATTTTGCATCCCATGCCCCCTCTCTC CCATGTCTGGTAGTCCCCAGTGTCTATTGTTCCCACCTTTATGTTTATGTGTATTCAATGTTTAGCTCCC ACTTATAAGTGAGAACATGTGGTATTTGGCTTTCTGTTCTTGTGTTAATCTGCTTAGGATAATGGCTGCC AGTTCCATCTATGTTGCTGCAAAGGATGTGATCTCATTCTTTTTAATGGCTGGTAAGCATCTTCATATAT GCCTGTTGACCACTGGGCTTTTCTTTCTACAAATTGCCTCCTTCTTCCCATAATTTGGATCTTAGGTGC AGAAGATTGTGCTAATCAAATTTCTTAAATAGTGTCTTGTCATTGGGGACATAATGGTCCATCTCTATTT AATTTTATTGTTTTTGGTTCCATTCCCACTTCCATTCCTTATGCCCATAGGTAGCCTCACTTAAATGTG TTTATGTCTATCATTTTGTTTATGTGATTAAAAAATCATTATTGGGATATTTACATGCCATAAAATTCAC TCATTTAAAGTCTACAATTCAATGATTTTTAGTAAGTTAATAAAGTTGTGCAAATGCCACCACAATCCAG $\tt CCATCACTAGTGCCGGGCAACCACCAATCTGCTTTCTGTGTGTATACATTTTCCTTTTTTTGGACATTTC$ ATAGAAATAAATAACTTTAATATGTAGTCTTTTGCATCTAGTTTTTAAAATTAGCATTGTTTTTGAGGTC CATCTATGTTGTAGCATTCATCAGTATTGTGTTCTTTTTTATTATTAATGGTATTCTATTGTGTGGATAT GCCACATTAAAAAATAATACTTTATTTTTGGAAGCAATTATAGGGTTACAGAAAAATTGACTATAAAGTA CAGAGATCCCATAAACTTCCTTCCCCATCTTCACAGTAACAAATTGCATTAGTGTGGTAAATTTGTTACA ATTGAGTTAACATTAATATTATTATTATTATTATTATTGAGGCGGAGTTTCGCTCTTGTTACCTAGGC TGGAGTGCAATGGCATGATCTCAGCTCACTGCAACCTCCGCCTCCTGGGTTCAAAAGATTCTCCTGCCTC AGCCTCCTGAGTAGCTGGGATTACACACATGCACCACCACCCGACTAATTTTGTACTTTTTTAGTAG CTCCCAAAGTGTTGGGATTACAGGCATGAGTCACTGCGCCCAGCCTGATACATTATTATTAACTAAAGTC CGGGGTTTACATTAGGATTCATTCTGTAATGTACATTCTATGGGTTTTGAAAAGTGTATAATTACAAGTA TCCATCATTACATCATCATACAGAATGGTTTCACTGCCCTAAAAATGTCCTGTGTTCCATCTGTTCATTC CAGGCTTATCTCAAACTCCTGGGCTAAAGCAATTCTCCTGCCTTAGCCTCCTGAGTAGCTGGGACTACAG GTGTATGCCACCATGCCCGGCTTGATCTTTTTACTACCTCCGTAGTTTTGTCTTTTTCCAGAATGTCGTGT ATTTGGAATCATACAGATATAACCTTTTCAGATTGGCTTCTTTCACTTAGTAATATGCATTAAAGTTTTC ${\tt GCAAATAATATTCTGTTGTGCAGACTTACTACATTTTAGCTTTCCATTTACCTAATGGTAAATCTTCGTT}$ GCTTCCAATTTTTGACAATTATAAATAAAGCTGCTATAAGCATTCAAGTGCAGGTTTTTATGTGGACATA GAGCTATTGCTGTCACTCTCACATCCTCACCAGCATTTGGTGTTGTCAGTGTTCTGGATTTTAGCCATTT GAATAGGTGTGTAGTGGTATCTCATCATTGTTTTAATTGCAGTTCCCTAATGACATATGATGTTGAACAT CTTTTCATATGCTTATTTGCCATCTGTATATCTTCTTTGATGAGAACTTTTGTTCAGAACTTTTGCCATT TTTAAATTGAGTTCTTTATTTTCTAGTTGTTGAATTTTAAATTTTATTTGTATATTTTGGGATAACAATC GCTTTTCTATTGTATCCAAAAAATCATCTCTAAACCTAGGTCACTTACATTTTCTCCTACGTTGTCTTCT ATGTGTTGAAAAGACTATCCTTTCTTGATTGAATTGCCTTGTTCCTTTGTTAAAGATCAGACTTTGGATG ACTGGGTCTCTCTCTTCACCAGGGCTGGAGGGCTGGAGTGCAGTGATCACAGCTCACTGCAGCC TTGACCTCCTGGGCTCAAGTGATCCTCCCATCTCAGCCTCCCTAGTAGCTGGGATTACAGGCACATGCCA ${\tt ACCACGCCTGGCTAATTGTATTTTTTTGTAGAGATAGGATTGCACCATGTTGCCCAGGCTGGCCTTGAACTGCCCAGGCTGGCCTTGAACTGCACCATGTTGCCCAGGCTGGCCTTGAACTGCACCATGTTGCCCAGGCTGGCCTTGAACTGCACCATGTTGCACCATGTTGCCCAGGCTGGCCTTGAACTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACCATGTTGCACATGTTGCACCATGTTGCACATGTTGCACCATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACCATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTGCACATGTTAATGTTGCACATGTTGCACATGTTAATGTTAATGTTAATGTTAATGTTAATGTTAATGTAATGTTAATGTTAATGTTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAA$ CTTGGGCTTAAGCAATCTGCCTGCCTTGGCCTGCCAAAGTGCTGGGATTACAGGCATGAACCACAACACC TGGCTAGCTAATTTAAAATTTTTTTTTTTGTAGAGATGGAATCTTGCTGTTGTTGACCTGGCTAGTTTCTA ATTCCTGGCCTCAAATGATCCTCCCACCATGGCCTCCTGGGGTGCTGGGATTACAGATGTGAGCCACCAC TTTTTTTTTTTTTTTTTTGAGATGGAGTTTCGTTCTTGTCGCCCAGGCTAGAGTGTGGTGGCACGATCT TGGCTCACTGCAACTTTTGCATCCCAGATTCAAAGGATGCTCCTGCCTAAGCCTCCCAAGTAGCTGGGAT TACAGGCATGTGCCACCATGCCTGGCTAATTTTTTGTATTTTTAGTAGAGACAGGGTTTTACTATGTTGGT CAGGCTGGTCTCGAACTCCTAACCTCAAGTGATCCACCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAG GCATGAACCACCGCACCCGGCCGATACTTTAAATGTTATTGTGCTTTTAATTTCAATTTCTAATTGTTCA TATTTGGTATATTAGGAAAGCAATTGACTTTGTATATTAACTTTGTATTTTGCAACCTTGCTGTAATTGT TTATTAGTTCCAGAAATTTTAAAAGTCAATTCTTTGGGATTCTCTACATAGAGAATCATGTAATCTGTGA ACAAAAACAGTTTCATTTCTTCCTTTTCAATCTGTATTAATTTTCTTTTCTTTTCTTGCCTCATTGCACT

GGCTAGATCTTCTAGCATTGTACTGAATAAGAACAATAAGCATGGATATCCTGTTTTCAATCTTAGAGGG ${\tt TTGAGAAAGCTCCCCTGTATTCCTGTTTTTTTGAGTTTATTTTTATGAGTGGTGTTGAATTTTGTCATGC}$ TTTTTCTGTGTCTATTGATATGATCATATGTTTTTCTTTTCTAGCCTGTTAACATAGTGAGTTACATTGA TTTTTGAAGGTTGAACCACCCTTGCATCTCTGGAATTAAGGCCTGATATTGTTTGGATATTTATGCTACC AAAGTGTGTGGCTCCCTCCCTGTCTCTCTATCTTGCTTCTGCTCTAGTTATGTGATATGCTGTCAGGTGC TGGGCTCCCCTTCACCTTCTGCCATGATTGTGAGCTTCCTGAGGCCTCACTGGAAGCTGAGCAGATGCC $\tt CCGCACCATGCTTCCTGTACAGCCTGTAGAACTATGAGACAATTAAACCTATTTTCTTTGTAAATTATCC$ GTGGTGCGACCTGGGCCCACTGCAACCTCTGCCTCTGGGTTCAAGTGGTTCTCCCACCTCAGCCTCCTGA GTAGCTGGAACTACAGGTGTGTGCCACCACACCCGGCTAATTTTTGTATTTTTTGGTAGACATGGGGTTT CTGGGATTACCAGCATGAGCCACCACAGTTGGCCTCAAGTATTTCTTTATAGCAATGAAAGAATGGCCAA GATGGAGTCTTAGTCCATTGCCCAGGCTGGAGTGCAGTCGTGGGATCTGGGCTCCCTGTAACTTCCACCT TGACTAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGA ACAGTTATATTTTTTGGATTGTCTTTGTTTTGTTTTATATCAGGGTAATATTAGTTTCATAAAATGAA TTTAGAAGTATTCTCTGTGTCTATTTTTTGGAAGATATTGTGTAGGATTAGTGTTAACTCTTCTTTTAAG ATTTGATAGAATTCTCCAGTGAGACCATCCGGATATGGAGATTTCTGTTATGGGAAGTTTTAAAATTATA AATTCTGGCTGGGCACTGTGGCTCATGCAGTAATCCCAGCACGTTGGGAGGCTGAGGCAGGAGGATCACT TTAGCTGGGCATGTGCCTATAGTCTTAGCTACTCGAGAAGCTGAGGTGGGAAGATGTCTTGA GCCTAGGAGTTCAAAGCTACAATGAGCTATGATCATGCTGCTGCACCTCCAGCCTGGGTGACAGTGAGACA CTGCCTCTAAAAAAATAAAAAAGTAAAATAAATTATAAATTCAATCTCTTTAATAGTTAAGGGCAATTAAGATTATCTGCTTAAGGCCAGGCGTGGTGGCACATGCCTGTAATCCCAGCACTCTGGGAGGCTGAGGCGGG CTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCTGAGATCATGCCACTGCACTCCAGCCTGTCAACAGAGC TGTAGTCCCAGCTACTCAGGAGGCTGAGACAGGAGAATCGCTTGAACCTGGGAGGCAGAGGTTGCAGTGA AAAACATTAAAAAAGATAACCTACTTAATATTGGATGATTGTAGTAGTTTTTTTCAAAGAATTGG TTCATTTAATGTAAATTGTCCAGTTTATGTGTGTAGAGTTGTTTATAATAATTCCTTATTATTTTTTTAGA TTTTTTTTTTTTTTTTTTTTTGAGACAGACTCTCGCTCTGTTGCCCAAGCTGGAGTGCAGTGGTGCGA TCTTGGCTTACCACACCTCCACGTTCAAGTGATTTTCCTGCCTCAGCCTCCCGAGTAGCTGG GACTACAGGCACACCACCATGCCCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACTATGTT GCCAGGCTGGTCTTGAACTCCTAACCTTGAGATCTGCCCGCCTTGGCCTCCCAGAGTGCTGGGATTACAG GCATGAGCCACCGCGTCCATCCAGTCTTCTCATTTGTGCTTTGTTAGTCTTGATAGAAGTTTGTCAAT GAGTGCAGTAGTGTGATCTCGGCTCACTGCAACCTCCGCCTCCCAGGTTCAAGTGATTCTCCTGCATCAG ${\tt CCTCCCGAGTAGCTGGAACTACAGGCTTGCACCACCAGGCCCAGCTAATTTTTGTATTTTTAGTAGAGAT}$ CAAAGTGCTGGGATTACAGGTGTGAGCCACCGTGCCCAGCCGATTTTATTAATTTTTCAAAAGAACCAGT TTTCCTTCCTTCTGCTTTGGATTTATTTTGTTCTTATTTTCCTAGGTTCTTGGTGTGGGAGCATAG ATTATTAATTTGAGATCTTCCCTCTTTTCTAATACACACATTTAGTGCTATAAATTTCCCTCTTGGTGGT GCTTTAGCTGTGTCCCTCAAGTGTTGATATGTTTTATTTTCATTTCATTTCAGTTCCAGTTCCATGTATTTTTAAA ATTTCCCTTGACCTATGTTTTATTTAGGAGTACTTGTTTCATTTCCATGTGATTGGAGATTTTCCTGTTA TCTGTTATTGGTTTCTAGTTTGATTCCACTGTGGTCAGAAATCACATTCTATACGATTTCAATTCTTGTA ${\tt AATATTTGATGTTTTAATGCTCAGGATATGGTCTATCTTACTATTTCTTGCATAGACCCTCAAAA}$ GGTTGTGTAGCCTGCTCTTGTAGGGTGGAGTATTCTACAAATGTCAATTGGATTTTGTTGATGCTGGTGT GCCATTCTCCTACCTCAGCCTCCCGAGTAGCTGGGACTACAGGCACCCGCCACCACCACCCCGGCTAATTTT TTTTGTATTTTTGGTAGAGGTGGGGTGCCAGGATGGTCTCGATCTCCTGACCTTGTGATCCACCCGCCTC GTTGCCCCAGGCTGGAGTGCAGTGGCCTGATCTCGGCTCACTGGAACCTCCGCCTCCCAGGTTCAAGTGA TTCTCTTGCCTCAGCCTCCAGAGTAGCTGAGACTACAGGTGTGCACCACCACATCTGGCTGATTTTTGTA TTTTTTATTAGAGATGGGTTTTGCCATGTTGGCCAGGCTGCTTTCAATCTCCTGACCTCAGGTGATACA TCTATCAGTTTTTGCTTCACATATCTTATAACTTTGTTGTTTTGGGGGGCATTTAAGATTACTGTGTCTTCT TGGTTGATTGATCCTTTTGTTATTATATGTCCCTCCTGTGTCTGGTAATTTTATTTGCTCTGAAGT TTATATTTTATTTGAAGAGTTTCTTATAGATACCATATAGTTAAACATCTTTTAAATCCCCTCTGCTAA $\tt CCCAGGCTGTAGTGATGCTCACTTGGCTCACTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCTC$ AAGCACAACAAAGAGACACAGAAGCAGTCCAAGCCTCTGATAAACTCTCCCATCCTGAATCCTTAAAAAT AAATAAACCTGTCTTGACTGGCAAGCCACCTTTCTTTTCTCTCCTCTTTTTAATTCCTACACTGACTT CAAGTGATCTGCTTCGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGACACTGCGCCCGGCCTAA $\tt CTGGTGTATCTAGACCATTTACATTTAATGTAATTATTGCTATATTAGGGGCTTAAGTCTTCCTTTTCATT$ TTGTTTTCTCTGTTTTTAAATTTCTGTTTTCTTTTTCCTAATTTCATGCTTGTTCCTGAAACATTTTTT AGAATTCCATTTTGAATTATTTATAGTTTTTGATGATAAACATATATTTTGGTATAGCTTTTTTAGTGG TTGCTCCAGGTATTACATTTTGTATATATGACTTAATACAGTGTATTGATGTCATTTTACCAGTTTGAGT AAAGTATAGAACTCTTAGCTTCCATTATGTCTCTACTTTTCCCTGTTTATATAATTATCTTAGCTATTTC CTCTTCATACATTTAGAACCACATCATACAGTGTTATAGTTTTTGCTTTAACCATCAAACATATTTTAGA AAACTCAAGAGAAGGAAAGCCTATTGTATTTACCCACAGTTTTGCTCATTATATTTTCTGTCTCCTGATG TTTGTTTTTGTTTTTTTTTTTTTTTTAGAGATGGGGTATTGCTGTCACCTAGGCTGGAGTGCAGTAGTGTG ATCATAGCTCACTGCAGCCTTGAACTCTTGAGCTCAAGCAATCCCCCTGCTCAGCCTACCAAATAGCTGG CTGTCACCCAGGCTGGAGTGCAATGGCGTGATCTCAGCTCACCTGCAACCTCTGCCTCCCAGGTTCAAGCA ATTATTCTCTCATCTCTGCCTCCTGAGTAGCTGGGACTACAGGCACACACCACCACCACCTGGCTCATTTT TGTATTTTTAGTAGAGACAGGGTATCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCTAGTGAT $\tt CCGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAACCACCATCCCCAGTGTGTTGTAGGCT$ CAAACACAAATTTAAGTTAGAGTTTTGTAAAGTAATATAAGTTCTCCTTTAAATGCATTTTAAAATATTA ATAATTTTCTTTAGTATTGCTTAACCCCCTGTAAGTCACTAGGGCTCCATAATTATTTTGGAACCAACTC CTAAGTTAATATTCTTCACTGTAATTTCAGCATCCTTAAATCTTCTAAGCACAGCTATAAGTTGAAATG ATTTTAGAGAACTGTGAGTAAAAATCTAATATGATAAAATGGCTCCATTTTGCGGGGAAGGATGTACTGG GAATATACTATAAATGAGATATAAATGATATTTTGAAATCAATATGCAATTTTTGTTGTATCTAATAAGG ACTTTTAAGGATACAGTCAAGAAGGAGAGGAGATGCAATATTACTGTGTTTTAGCCTTACTAAAGCAAAGGAAA GTACTGTACGTAAAAGTTCTCTGGCGCGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGC GGGCAGATCACGAGGTCAGGAGTTCCAGACCAGCCTGGCCAACATAATGAAACCTCGTCTCTACTAAAAA TACAAAAATTAGTTGGGCGTGGTGGTGCACCTGTAATTCCAGCTGCTTGGGAGGCAGAGGCAGGAAAA TTGCTTGAAACCGGAAGGCAGAGGTTGCAGTGAGCCAAGATCGTACTGCACTCCAGCCTGGGCAACA AGAGAGAAACTCCGTCTAAAAAAAAAAAAAAAAAGTTCTCCGGCATTTTTTGAAAAAAGGCAAACTGCACTC ATAAAATTTTACCTTTGGAACAGAATCTTTATAGTTACATAATCAATGGAAAGAACAGATTTGATGACAA TATTGAGCTTATGAATTAATCAAATTTGAAGCTGCTCTACACCCCAGAATTATTATTATTATTATTATTAT TATTATTATTTTTGAGACGACGTCTTACTTTGTCTCACTTTGTCGCCCAGGCTGGAATGCAGTGGCGCG ATCTTGGCTCACTGCAACCTCCGCCTCCCAGATTCAAGCGATTCTCCTGCCTCAGCCTTCCGAGTAGCTG TAAGACGGAGTCTCGCTCTGTCGCCCAGGCTGCAGTACAGTGGCGTGATCTCGGCTCACTGCAAACTCTG CTGACCTTGTGATCCGCCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCTGG CGGCCTCTCAAAGTGCTGGGATTACAGGTGTGAGCTACCATGCCCAGTTTATACCCAGTCTTGTTAAGTG ATGGAGTTTCACTCTTGTTGCCCAGGGTTGTAGTGGCACAATCTTGGCTCATTGCAACCTCTGCCTCCCA GGTTCGAGCAATTCTCCTGCCTCAGCCTCCAGAGTAGCTGGAATTACAGGCGCCTGCCACCAATACAATA GGTGATCCACCCACCTCGGCCTCCCAAAGTGTTGAGATTATAGGCATAAGCCACTGCACCCGGCCTAAGA TTCTCTATTACTTGAGAATAAAACAACCTGTTAAAATATTATACCACAGTGTGCTTGGCCTATGTAACAT CTGCTTAGATAACATACTCTCTTAAGCAGTAAATGAGTATGAGTTACAGGGGCTCTCCTTTTGTTCTTTA GGGACTCTAGAAATGCCAGATAATTCCACTTTTGTGGTGACAGAAGAATCTGGCAATAATAGCTACCGTT TACTGAACAACAACTGCACATTAAGCACTGTGTCATATGCTTTAGGTATGTTATTTGATCCTCACCAAAT ${\tt TCTTTCTTTTTAACAAAGAAAGAAACTGAGGGGGGCTGGGTGTGGTGGCTCAGGTGTAGTCCCAGCATT}$ TTGGGAAGCTGAGGTTGGAGGATCACTTAAGGTCAAGAATTTGAGGTTACAATGAGCTATGCTAGCACCA GATAAATGACCTTTTAAACAAACAACATGTAGTATAAAGTTTATGACATACAATCATAAAAAATAATTAA TAAAAAAAACAGCCAATGTGACCTGATATTTATAGAACACTCTTAACAATAGCAGAATACACATTTTTAA AAGTACCTGTAGAACATTTATCAAAATAGGCCATACTATTTTTCTCAATAAATTTAAAATTATTTCTGTC ATAAAATATACTTTCTGGCCACAATATAATTAAATTAGAAATCAATAAAAAGGATATCTAGAAAATCTCC AAATGTTTGGAAAATAAAACTTCTATATCACACATTAGTTTCAAAAAAAGAAATTGGAAAGTGTTTTGAA CTGTCTGAAAATTAAAACACAAGATAATAAAACTTGTGAGATACAATAAAATAGTGCTAGAGGGAGTCTT GTAGCACTAAATGCCTATATTAGAAAATAGGGGCCCGGCGCGGTGTCTCATGCCTATAATCCTAGCACTT TGGGAGGCCGAGGCAGGTGATGGCTTGAGCTCAGGAGTTCAAGACCAACCTGGGCAACATGGTGAGACCG CCTCTCTACAAAAATACAAAAATTAGCTGGGCAGGGTGTCATGCACTTGTGGTCTCCGCTCCTCAGGAG GCTGAGGTGGGAGGTTGAGCCTGGGAGGTTGAGGCTGCACTGAGGCATGTTCATGCCACTGCACT

ACGAAATTAGAAAAAGAGTAAGTTAAACACAGAATAAAATGAAGACAGGAAATAATTAAGATTGGAGCAG AAACTTATGAAATAGAAAACAAAAATAGCAGGAAATCAATAAAGCCTAAAGCTGGTTCTTTGAGAAGATC AATAAAATTAATAAATCCCTAGGCCGGGCATGGTGGCTCACGCCTGTAATCCCAGCATTTTTGGAGGCCG AGGCGGGTGGATCACGAGGTCAGAAGGTGAGACCAACCTGGCTAACACAGTGTAACCCAGTCTCTACCAA AAATACAAAAAAATTAGCCGGGCGTGGTGGTGGGCGCCTGTAGTCCCACCTACTCAGGAGGCTGAGGCAG GAGAATGGCGTGAACCCAGGAGGCGGAGATTGCAGTGAGCTGAGATCATGCCACTGCACTCCAGCCTGGG GTGGTGGCTCATGCCTGTAATTCCAGCACTTTGGAAGGCTGAGGTGGGCGGATCACGAGGTCAGGAGTTC TGGCACATGCCTGTAATCCCAGGTACTCAGGAGGCTGAGGCAGGAGGATCACTTGAACCCAGGAGGCAGA GGTTGCAGTGAGCCGAGATCGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTTAAAAT AAATAAATAAATAAATAAATTAAATTAAATTAAATTAAATCCTCTAGCCAGACTGAACAGAAAAAAAGT GAAAGGAAACACAAATTGCAAATATCAGGAATGAAGGAGATAACCTACAGATTCTACAGCTATTAAAATA ATAATTAGAGAATATTATGAAAAACTTTTTAACAAAAAATTCAACATATATAAAATGGACAAACCCCTTG AAAAAAACCAAATTACCAAAAATTGTACAAGAAGAGCTGACCTGAGTAGTCCTATATCTATTTTTAAAA TTGAATTTGTAGTTTAAAACCTTCCTACAAGGAAAACTCCAAGCCCAGATGGCTTCAGTGGTGAATTATA CCAAATGATTAAGGAGAAATAACAGCAGTTCTCTACCACCTCTTTCAGAAAATGGAAGCCAATGGAATAC TTCCCAATTCATCCTAGGATAACAGCATTACCCTGATACCAAAACCTGACAAAGACATTCTTAGAAAACT ACAGATCAGTAGTCTTCAGGAACACAGGTGCAAAAATTCTCAAGGAAATTTTAGCAAATCCAACCTAACA ATATGTAAAAAGGACAATGCATTAAGACCAACCGGAGTTTATTTCAGGCATATAAGTCTTCATTTCAAAG CCCAATCAATATAATTCACTACATTAACATAAAATTAAACCATATGATTACCCCAACAGATCCACCAAAA TCTTTTTCTGGTTTCCAAGTCCTTGAAACAAAATCCAACTATGTCCAAATGCCATGAAGGTTTGTGTTGC TGCTGATGTCAGAGATAAACATTACTTTTAAGGACAGGACGGAGTGGAGTAGTAGAAGCATTTAGATGAG AAAAAAGACAAATTAACTTGTTTAATTCTTCTTAAGAGCCAAAATGCAGGTGTTTCTTGCACAATGTAGT CCCGAGTAGCTGGTATTACAGGCATGCGCCACCATGCCCAGCTAATTTTTGTATTTTTACTAGGGACGGG TGCTGGGATTACAGGCGTGAGCCACCGTGCCCGGCCTATTTTTCTGTAGTCCCATTTTCTTGCTTCAGAG TTATTCAGGAGTTAGCACGGTACTACAATTGCTATGCACAGAAGCTGAGGAACATTTGGTAGTGTTAAAT ACCTAACATTGACTTAAATCTGTACATAGGTAGTTCTAGATATACTATGCTTCTTTACTGCATCAACCAG TTTATTTATTTATTGAGACAGAGTCTCGCTGTGTTGCCCAGGCTGGAGTGCAGTGGTGCGATCTTGGCTC ACTGCAAGCTCCGCTGCCCTGGTTCACACCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGAGACTACAGG TGTCCGCTACCACGCCCGCCTAATTTTTTGTATTTTTAGTAGAGATGGGGTTTCACTGTGTTAGCCAGG ATGGTCTCGATCTCCTGACCTCGTGATCCGCCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGA CAGGCTGGAGTGCAGTGGCACGATCTCGGCTCAGTGCAAGCTCTGCCTCCTGGGTTCACGCCATTCTCCT AGCCTCCCAAAGAGCTGGGATTACAGGCGTGAGCCACCACGCCTGGCCGCCTATTAATTTTTATAAGCAG TTTGCTTTTAATATTTTAGAAGAAAATAGCTCTTTGAATACATTTAAAACCAGTTTTAACTTTTTAAATT TTAATACTTTATTTATTTATTTGTTTGTTTGTTTGTTTGACAGAATGTCTCGCTCTGTTGCCCAGGC TAGAGTGCAGTGGAACAATCACAGCTCACTGCAGCCTCAAACTCCTGGGCTCAAGCCATCCTCCCACCTC TGCAGAGACATGGTCTCACTATGTTGCCCAGGCTGATCTCAAACTCCTGACTTCAAGTGATCCTCCTGCT TCAGCCTCCCAAAGCGTTGGAGGTTACAGGCATCAGCTACTATGCGCAGGTTTTAATTTACTTTTGAATA AGTATGTGAAATTAAATAATTCAAACTTAAAGCTGTTGGAACTTTATTCTGAGCCTTGAGAGGTGTGTGG $\tt CTGTGCAGCCTGAGTCACATGGCATGCAGCTGCAACTTTTGCCTTGTTTTTCCTTTAGATAATTAAGAAC$ TTAGCAATCTGTAACCAATCAAATTGCTGTGGCATATGCACTAGTCTTGTATGAAAAGAGTCTTGCTCTG TCGCCCAGGCTGCAGGCAGTGGCAGTCATAGCTCACTGCAGCCTCGAACCTGCCGGGCTCAGGTGATCC TCCCACCTCAGCCCTCTGAGTAGCTAGGACTACAGGCATGCACCACTGTGCCCCAGCTAAATGTATTTTTT GTAGAGATGGAGTTTTGCCATGTTGCTCAGCCTGTTTTTGAACTGGGCTCAAGCAATCCTCCCATCTCAG CCTTCCAAAGTGCTGGGATTACAGGCGTGAGCCACCATGCCCGGCCAAAACCAACTAATATTAACAGTAT ATGATAGTATATTTTCATAACGTTCTGCACTCTGATTTTCTTCTCAATGTATCTTGGCAGTCTTTCTCA GTATATAGTGACTTTTCTCATTTTTTTATCTTTATACCTCAATATCTGGCACATAGTAAGCAAATCATAA ATGCTGAGTGAATGAAATATTAAATGAATAAAAAGGAAATTTTTGTGCTGCTATTGGAAATTAGCTCTCT ATATATTTCAACATGTTACACATATACAATGATCTAAAAACTTGTCTTACTCTTTCCTATCCACTAGAGG GAGACATCAACCTGTTGTGGAAAAGAATGATCACTTAAAGTCTTTAGAAATTCTGAACCAACTCTCTAGC AGGTGATCCTTGTTAGAATTTGAGCCCTTAACGCTATCCAGGACTGGAGGTTGAAGGGACGATAGAGGGA GCAGGAGGAGAATGCACATGGATTAAGGAGCGAGAACACAGGTGAACTTCAGCTTTTTTGCTAACAGTCA AGATTGCTGATTTGTATGTATGTTTATGAATTTCAGTAGAGAAAAAGACAATATTCAAACTGAGCCATG CACCCAAAACAAGAGAACAGCCAAGAAGTGTTCACTTCTATCAGTGCCCTGGGTTGTTTGAAAAAAAGAAG AATTCAAGCCACTCGGGGTTTAATCACCGAATTGCAAATTCCTTGAACATTTAACAGTAGGCTCTCTTGG CTGGGCGCGGTGGCTCATGCCTGTAATCCCAGCAATTTGGGAGGCCATGGCAGGAGGATTACCTGAGGTC GGGAGTTGGAGACCAGCCTGGCCAACATAGTGAAACCCCATTTCTACTAAAAATACAAAAATTAGCTGG GCGTGGTGGCAGGTGCCTGTGGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGA GGCGGAGGTTGCAGTGAGCCGAGATTGTGCCACTGCACTCCAGCCTGGGCGACAACAGTGAAACTCCATC ATTCTATTACATAGAGGACACATAAGTTCTTTGAATGCTTAAAGCAATGTTTCCTAAACTTCTTTGGTCA TGAAATCACCCAGTGGCTTGTGTAAAATAAACATTCCCAGGACCTGCCCTAGAGCACCTGGGTTAGAACA CACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACGAGATCAAGAGATTGAGACCATCCT GGCTAACACGGTGAAATTCCATCTCTACTAAAAATACAAAAGAATTAGCCGGGCATGGTGGCAGGAGCCT GTAGTCCCAGCTATTTGGGAGGCCGAGGCAGGAGAATGGCATGAACCCGGGAGACAGAGCTTGCAGTGAG ${\tt CCTGTGAAATGGGAGAAACACTGCTGCAAATTACTCTTATAATTGGGTCAGGTGTCAGGGGTCTTTCTCT}$ TCCGTTCACTGTCTTCTCTACCCTCAGAGCCCAAACTTCCCAAAGAGGAAAACCTGCTCCTTGCCATCTC TTAGGCCAAGGCTTCTGTACACCTGGGAAGTCCTTCAATCTGAGGATCTCTGGGTTGTTTTCAAGCTACT ATTTATTGAGAATTTACAAAGTGTCAGGCACGTTACAGCAATTTGTCATTTCTATGAAATAGCTTCTTGT GCTATTCCCATTTTACAGAGAAAAATCAAAGAAGTTGGGAAAATGTCGAAGGGCACACAACTAGGAAGTG TTTGTGCTGAAAACCCACCCTAGGCCCAAGCCTTGGAACTCCAAGCCTGGGTTCCATCCCTGCACTGGGC AATTCTGATCTATGTGCGCTAGTTTCCTTGTGTTCTCTGTTCTCCATAGAAATCCTGGGCTCTCTTCT CCCAGCCACAAGGTTAGGTTGAAAAACAGAGCAGATGGAGGTAGTTTGTAGCCTACAGGTGCCCTGAATG AAGCTTCCACAGTGCTAAAGTGGAAGAACGAGGGACTCCAAGGGAAGGATTCAAGGCTGGGCCCATGCAC CTGTGTAATTCAGAAGAGACCCCAGAGGAGATCAGCGCCCTCTAATTAGCCCTGGTAAGGAGCTCTGGGA GTTACTGTAACTCTCAGAAGAACCCAAACATGCGGGAACGTGACTTCTTACCTTCTGAAAGTCCACAA ${\tt AATTCCTGATTGCCACCATTAATTTGTCACTTATCATTTGCAACAGGCATTGTAGGTTGTCTTATGCATT}$ TGTCTTCTCCCTTCAGCTAGTGTATAAAGTCTTAGGGAGACCAGCAGTTCAGAGAGAATGGGCTTTGGTG ${\tt TGAAACAGATCTGGTTTGAACCCTCTGCTACTTACTAGCTGTTGGGCAAGTTCCTTAAATTCTCTGAGTC}$ TTAATCTTCTCATCTGTAAAATGGAGACATAAGGAGTACCCACCTCATTGGATTGTTTTAAGGATAAAAT CTGTGAGCAAACACCCTCATATTTCCTTGTGTCTCAGGTAGACACTTAAGGTATTGCAAGCATTAAGGGA GCATTGTCACAAAGAGATAAATGCATGAGGGCAAGATGCAGTCTCAAAGAAGAGTGTTTTATGAAAGAAT TGCAGTGGTGTGATCTTAGCTCACTGAAGCCTCAACCTCCCAGGCTCAAGTGATCCTCCAGCCTCAGCCT CGCCATGTTGTCCAGGCTGGTCTTGAACTCCTGGGCTCGAGCGATCCTCTCATCTTGGCCTCCCAAAGTG CTGGGATTGCAGGCATGAGCCACCACCCAGCCTGTCAGAAAAATTTTAAGGTGAAAAATAACTAAAGAA GGAAGGGATGGGGTCCGGTTGAAAGGCCTGTGAGATAGTAGCAGTGCAATATGGCAGATGTTGACAGCCT ${\tt CAGTGCTAGGAACAGAAACTGAATCTCTTGCAAGGAGGCAGGTGTGCATCTGTATGGAAGTCAGATGA}$ TGAGGAAGCACTTGACTTGACTATGAGCAGAACCATTAAGAAGCTAGTTAGCTAAACTGCCTGGACAGTA GCCCATGGAACAGCATTGGTGATCCTTAAGTAGCTGCATGAACTACTTGGAGAAGTTCATTTTCTGTTTA TAATTCCCAGCAAAGGAGAGGACTGAATAAGAGAGAAAAACGATTCCTTTCTCTGGTTAGGTTCATCA GATCAAACGGTGACATATGTGAAAGAAGCACGCTCTGTGCACAAAAAATCAAGTCTGTATTTTTATAAAA GCCATTTCTGGGCTGGCCGGGGGGGCGGCTGACGCCTGTAATCCCAGCACTTTGGGAGGCGGAGGCGGGTGGA AAAAATTAGCCGGGTGTGGTGGTGGTGCCTGTAGTCTCAGCTACTTGGGGGGGCTGAGGCGGAAGATTGT GTAATGAGCATCACTGGAGAGTTAGTTGCTATGGGTCTAAAGGACAATATGAGGCAGTTATAGTAACTTT CCATGATATGAACAAAGAAATTGAAAATGTTAGATACATTTACAAGAAGATGTAGAAAAAAACTTTAGTCA AAATTTTTGAAATATTTTTGAAATATTAAACTATGAAATCAGACAGTCTTATCTATGGTCTCAAGCCAT GTCTGTCTGTACCTTTTTTTTTTTTTTTTTTCTCATTTCAGGGAATATTACACTGGCTGACTTATTAATATCTT $\tt CTGAGCCAGAAAATGTAAGGAAGCTGCATTTTCAGAATTGCATTTGAGTCATTTGTGAAATTGCATATTAGGAGCTGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTAGAGAATTGCATATTGAGAATTGCATATTAGAGAATTGCATATTGAGAATTGCATATTGAGAATTGCATATTGAGAATTGCATATTGAGAATTGCATATTGAGAATTGCATATTGAGATTGAGAATTGCATATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAGAATTGAAATTGAATATGAAATTGAATATGAATATGAATATGAATATGAATATGAATATGAATATGAATATAGAATATGAATATGAATATGAATATGAATATGAATATGAATATGAATATAGAATATGAATATGAAATTGAATATAGAATATGAATATAGAATATAGAAATATGAAATATAGAAATATGAAATATGAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATATAGAAATAGAATAGAATATAGAATATAGAATAGAATAGAATATAGAATAGAATATAGAATATAGAATATAGAATAGAATATAGAATATAGAATAGAATATAGAATAGAATATAGAATATAGAATATAGAATATATAGAATATAGAATATAGAATATAGAATATAGA$ TGCCAATGACCTCTAGGGGCTAGTTTCTCTTCTAGCTCAAGAGAATTGCTGCAGAGTTGGAAGTAAGGAC AAAAATGTGTATGCTTCATGTTTGATTTCAAATGCATAGAAAATTAGAAACTTAAGGTATGCAAGGGATT CAGGTGGTTCATTTAAACTGCAGGTCAGAGCAACCTTGTCTCATGGTCCTGGTGCCCAGGTATCAGGTTG GGTCTGTCTTGCTGCTTATGTCCTTGTTACCCTCTGAGGGCCCCAGTCCAACGCAGATCAATAAAGAATA TGGGCTCTACAGGACAGACATGCCTCCATTTATGCAACAAATAAGAACAGCATCTCATGACAGTGGAGAA AACATGGGATGTGCAGGTAGGTAAAGTTGGGTGGAAACTTTCACCCTACCAAATGCACATGGGTGA CTTTATAAAATAAATGTTAGCTCTCTGAGCCTCAGTTTTCCCATCTGTAAAATAGACAGTCCCAGGGAAT AAAATGCTCAATAAATATTAGGTTTGTTTTTATTTCTACAAAAGATGTGATCCTAAAGAGCTCTATCCAA ATTCAAGTTTCAAATGTCAAATCACATTTTGTGAACTTTATGTTCAGTTGAGATGATCTCTGACATATTA ATTAGTAATCCTATCTTTTCATTCATCACCACCAAAAAAAGGTGTTATTGCACGTTCAATTAATCTTTC $\tt CCCTTTATTAATTCCATAAGTGTAGGGTTTTATCTCTCAGATTCTCTTAAAACAGACCAATTTATACCCA$ CATAATATAAATAAGCTTGTTCCTATAACACTCTGGAGCAGATAACTATCCCAGAACCCAAATCCTCCTA CTTGGCTTCAAGCTCAGAGAATAAAGCAACAATCCAAAGGCACCCTTTGGCATGACACCCTTCTAGACAT CTGTAGCATTCCTCCTTTCCCTCCACTTTTCCTATTAGCTTTTGCTTTCTTGCCTTTTACAGGGTTTTGT TTTGCCTCTTGGTAGTTTCTTTCCTACGGAAAATTCTCCCTCTGATCTTTCCAAGTCAAAGGCTTCAGCA AACATTTGTTGAACGCGTGGATTGTGCTAGGTGGGTGTTATGGACCATGGAGAATGCTAGAGATGTAAGA CATGCGCTGTCCAATCGCAGCGCAGGTTGTGTTGACAGGTAAGATGAGGGGCTGTAGGGGAGCCAATGTGC ACGTTCCACTGGGCTAATGTGCTCTTCACCTTATTTAGGCTCTTGGCTTTGGGATGTGTAAGACTTTGCT ACAGCAAACCATACCTGTACTACATTGACTTCCTTTGCTTTCCCAGGTGACATCTAGCTCATGCTGCAAG $\tt CTCATCTTGTTAATCATAAATGCTAGTAAGTTAATATTACCCATCATATATAACATGACTTAATTTTAAC$ AATTCAATGCTTTATCCCCAAAAGATGACTTAATGGTGACAATTTCAATCCCCATTGTAGGATATTTTGG AGACAGGCAGTCCTTTCAATGTCATATGTGGGTGCTTCCTTAGGCAGGTCAGGGGTGAGGTGAAATGAG GCTGGGACCCTGCTCACTTATATAGCAGGCATCGTTCTCAATACCAGGCTTCAGGGGGGCTTTTTGGTCTA GCCATTGGTATGAACTGCCTCAAGAATAATCCCTTCATCATTGTGGTCACAATTCAGGTAGAATTGGAAT TTCCTTGTATAATAAACAGCTTCTGTGGGTGTTTGAGCTGCTCTGAAAAGAGAACATGCTGTTCCTGTGT GTAGAATGCCTTCTGAAGGAAGCATCACAGTGAACACAGAGCAGAAGCTTGGCACACAGGTGGCAGAAGT GGAGGTAAATGGGTCCTTGGCCTCTCCTGGATTCAAGTCCTTCTTAGCCACTGATAGGTCATGTGACC ATAGGGAGGTTGTTTAACCTTCCTGAACATTCATTTTCTCAAGTATAAAATGGGGGTAATAGAATTTGCC TTATAGGCTTGCGTATAAAATAAGAATTATTGAGAGAAAGCGGGGCATAAATGTCCAATAAGCGGTAGCT GTCTATGAAGCCACTGTTGTTACTGGGTTCCTTTCTCACTAGGTGGCTTCAGGTAGCTGACAGAAGCTCT GTGAGCCTCAATTTCCTCACTGGAAAAGTGGAGTCAATATCTCACTGAGCTGGTGTGAGGATTAAATGAG ${\tt ATGCTGTGCAGGTGCTTAGCACAGCGTCAGGTATGATGTTAATATTGATAGATGCATTTTCTTCACCCTC}$ ACCTATCTTTTTCTGCCTGTTGGCTTATGGTTGAAATTCCTTCATGACGGTTTCCATTTCCAGAGATATC GCTCTGTCGCCCAGGCTGGAATGCAGTGGCGCGATCTTGGCTCACTGCAACCTCCGCCTCCCATGTTCAA GCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTACTGGCATGTGCCACCACGTCCAGCCAATTTT TGTATTTTTAGTAGAGACGAGGTTTCACCATGTTGGTCAGGCTGGTCTCAAACTCCTGACCTCGTGATCC ACCTGCCTCGGCCTCCCAAAGTGCTGAGATTATAGGTGTGAGCCACCATGCCTGGCCATGAAGCTGATTT TTTTAAACCATCATTTAACATTTTCTCCATAAGGTGGCAAGGAGGAAGAGCATATGGGGACTGGGTACTT TGAGAGACCCCAGGACAGGAGACAGGGAGGCTGAGATTGGCATGTTGTCTGCCAGTTATTTGCCAGCG ACACACTCTTCCCGTCCAAACTAACTTCTCTGCCTCAAGGACAGGGAGACTCTGCCTTTCAACCTGAGAG AAACCAGGACTCTCAGCTTTAATGAAAATTGGACTTAGGGTGGGGCAGTGGAGACTTTTCACAGCTATTG TTTAGCTGATGAAGCAGATGCTTCTCCATCTTTGGAGCCTGTCTTCATTACCTGTGGACCTCATCTTTAT TTTCCCTCCAAATGCCCCCCCTCGTCTTCCTCTATTAGAGATCTGGATCACAACCCTCAAAAACCATGTC $\verb|CCTTATGCCACCTGAGTAGATGGTTTGATGATTAATTAGGCACAGATGTGACACTGGGGGGTTCTCACAA| \\$ GAACTGGGGCTGCCACCAGGGGGCGCGAGGGGCCTTCGCCCGAGAAGAGGGGTGGGCAGGTGCCTCCAGC GGAGAAGGGCCCCGTGGCCGGAGGCACAGGTCTCCCCGGTGCCACTTCAAGTGAGTTCGAGGAAGTACCT TCTAGTCCACGGCTTTGCCACTCCAGGGCCCGAGGTTACGTTTGCTGCTGGGGATTTGACAAACCCAAAG CCTCTCTGGTTTCACCACTGGCTCCTTAGAATCAGACATCTGTTCTGAATGACACTTATGTGAGTCAGGG GCTGAGGACGTGATCCTCGAAGTGTGGTCCCCAGACTGGCTGTATCAGTGTCGGCATCCCCCAGGACCTG GTTGGAAATGCATATTCTCAGGCCCTACTCCAGACCTCTTAAATCTGAGACTGGGGCTGCGGGGAGCGCC ATCTGTGCGCCACTATCCTTGTGGGTGGACCAGGAGTCGGTTCGAGGGTGCTCCCACTTAGAGGTCACGC GCGGCGTCGGGCGTTCCTGAGACCGTCGGGCTCCCTGGCTCGGTCACGTGGGCTCAGGCACTACTCCCCT CTACCCTCCTCTCGGTCTTTAAAAGGAAGAAGGGGCTTATCGTTAAGTCGCTTGTGATCTTTTCAGTTTC TCCAGCTGCTGGCTTTTTGGACACCCACTCCCCCGCCAGGAGGCAGTTGCAAGCGCGGAGGCTGCGAGAA ATTTTAGAGAAGGCAAGGCCGGTGTGTTTATCTGCAAGGTAAGCGCCCCTTCGCTCGAGGTGTGGTTTAA TTGTCTCATTTTGTTTGAAATCCTGCGGTGAGAAACCAGTCGTGTTGAGAACAATAAAAGACCAAAAAAAC TAACTGAAAAACATTTTATTTCCCTATGGTTTTCCTCGATGGACTTCCCCACTATGGGTGAAATGACAAT GGAGTTGAATACACTTTCTGATTGAACTTTGAGGGCCTGGGAAGATGTACACGTCTCAGGCAAGATGATA GGGGTTTTAAAATGTATTAATTGGCATTCCTTAGCCATGTCAGCAAGCTGCGTTCCTCCTTTCCTGGGCA GACCAAGCTAAGCTCTAACTGGTCTCCTTTATTTGCTGAAGAGGAGTCCAACAACTGCCCTCTAACACCC TGCGTGTTATTCTTATTGGAAGGACAATATTAAGTCAAGTGAATGTCATTTTTGTGAAAAAACTTTGAGT GGACTTCTATTTAGGAAGATAAGGTTGATTTAATTTTACTCGCTGTTTAAAAAGCAGGATTGTGTTTTGG TGTGGTAGGCAACATTTTGGAGGACAGACTTTGCCTTATTTTGTTATATTTCTAGTATTTACATGGGCAT TCCATTAGAAAGTTTTACTTTTGCTCTAAGTTTCGTAACTCGGTGTCTAGTGAGGGGAAACATGTTTGTA ATTTAAAAAGTGAACATGTGAAAGGAAAGGCTTTTCTGAGAGTGTTGTAAAACAAATGTAACGTGACTAT

GAAAAGAACATGATTAACATCTTTGACTCCTATTTTTTCTGAAGAAAATGTATTTTGATATGAGTTCTAG AAGAAGGAAACTATAAGGATCTGTTCATCAACAGGCATTAGAGTATACACCGTAGGATTGCATTTTACGT TCAAGCATTTTTTTAGATGAATTTCTGAAACATTCTTATTTTAAAAGCCATCAGATGCTTGTTAACACTT AAGTCTTGCTCAAGACATAGAAGTTTCTGAAATCAATTAACATGTTTAGGACACATTTCGTAGTGTTCTG AGGGATGTGAATAAATCTAATCACAGTTTACATTTCTTAATGTATTTATAATTCAGAAAAGGTAGAATTT AGTAGTAAATTCAACTCATAACCATATAATTAACATTTAATAGATATTGATATGTTCACTTTTAAGAATA AGAAGGAAATTTTCTATAAGTGTATGTTGAACACATAATAATTCAAAATTCATGTGATAATTTTAGGTGA TGCTTTGAGTCGTTTTATAGAATATAAATATGGATAAAATATAAAATACTGAAGGCTGAACTCAAAGTGT TTAATGATAAGTTTTTGATAATACATCTAGAAACCTTGAGAATTGTATGCTTGAACGTTAGATTTCATAA TTCAGTGTCTAGCACATTGTTTTATATGCAATAGCACTTTAAAAAAATTAGGCTACAGCAGTATAATTTA CATACAGTAAAATTTAGCCTCTGTAAATGTACCTCTATGAATTCTGACAGATGCACAGTCATGTAACCAG CCCCTGAAAATCACTGATCAAAACTACATAATGATTATGTGGTTTTTGCTCTTTTAGTACGTTTTTACTTAG ACATATTTTCCTTTACTTCTTTTGAAAGAAAAACCTGTTTTTCCCTTTTTATAGGATGAGTCAGTTTGTG CTATTTTTAATTCTAGTACCTTGGGATAAATCAAGGCAAAGACAATGCTATTTGCAAATGGGAAACTTGA GACTTGGACTAAGTGTTAAATTCATATAGGGCTAATAGATTTAGTTCTTAGCAGATTTAGATTCTATTGT GGTTTAAGCCTTTGGTTATGGCATATATCATTAGTTATCCTGAATTGAAATACAAGGCCATTAAAAGTTA TTTATATCATATTAATAGAATGCATCATTCTTTTATAATCTTTGAATTTTAAAACTTCTTTATTAAAAAA AAAACTACTTTTCATTATACCTGAGATTAAGAAAGCTACCTGAAATTGCATATTATCAAATAGTGAGAAG CAAAACAGGGATTGAAAATGACAAATTGAAGACATTTAAAATGCAGAGTGATTACAATTGCTGAAGGTAA AATATTTATCTTCATAGGGGCTTAGGTCTGTGTCCAACTTATTTGTAGATGTCAGGATTTTTAAATTTCT GTGCTCATGTCTTGAAGTCTAGATTTTCCTGCAGGGTGGAGATGTATAACCTTTTGTAAACTAATATTTT TATATATAAAAATTGATGTCTTTTTCCTTTTTCCTTTGTTCTATGAAAAACAGCCTGTATTTTAAATAT GTAACTTACCTTGCATACCCAGTTACAGTGGTAGTAACTAGGATATGCAGAGTGGCAAGTTTATGAGGAG CTAGCAAACTGGATAGTTGGCCTTCCTAGCTGGAATTATGACAGGTCTTGAAAATGAAGGGCTTTTAGTG GACTTGTATATGTTTCCTCAAAGCCAGACTGCAGCATTTTGTTAGTAAATTGTTGTGTGTTCTACTGTCA AACCCAGGCCTGGAAGGGGAGTTGAGTGCATTCAGCCTAACTTCTGGATTGGCTGTCATCTTGAATCC CTTCACTCGGAATTCTCTCTGACCCTGTCCCAAATGAATATTTGAATTTGGTCCAGTTCCTACAGAGCAT GGTCTGTGGCTGTTGTTGGTGTTAGGGAAGAGACAGAAACTTGCTGTTGAGAAGAAGACACTTGAGAAGA CTGATGAACTCTCTCCCACCCCTGCCTTCGAGGCTTGGTCCTCCTACCCTATTCAAACCCTTGAAACTCT TTCCTATCCAACTAAATAAGCGCCAATTGGTTACTAGGAGAATTAGCTTTTCCTCATTTTAGAAGGAAAC AGGGTTTCCTTATGTACATGTTCTTAAGAATTACATGCAAATCAGTTATTAATGATGAGTTCTCTGGTGA TTTTGGAGTGTTTTATCTTCCTAATATTAAATTAATTGAGGGCCTTAATATTTTGTTTTGAAAGAATATA TTTAAAAAGGCTGGGTGTGGCTCACGCCTGTAATCTCAGCACTTTGGGAGGCCTAGGTGGCTGGATC ACTTGAGGGCAGGAGTTCAAGACCAGCCTGGCCAAATAATGAAACCTTGTCTCTGTTAAGAATACAAAAA ATTAGCTGGCCATGGTGGCTCAAGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCATGAGAATTGCTTG AACCTGGGAGGCCGAGTTTACAGTGAGCCGCGATCATGCCACTGCATTCCAGCCTGGGCAACAAAGCAAG GGTGGTTCATGCCTGTGATCACAGCACTTTGGGAGGCCGAGGTGGGAGGATTGCTTGAGGCAAGGAGTTC AAGATCAATCTGGGCAACACAGTGAGACCCTATCTCTACAAAAATTTAAAAATCAGCTGGGCATGATGGT GCATGCCTTTAGTCCCAGCTACTTGGGGGGCTGAGTTTGGAGGATCCCTTGAGCCCAGGAGATCAAGGCT GCAGTAGGCCATGATCTTGCCACTACACTCTAGCCTGAGTTACAGAGCTAGAGTATAACCCCCACCCCCC AAAAAAGCTAATAATTGTCAAACAGCTACTTATGCACATCAAGGATGCTTGTTGCTTAAGAAATCTTTTT AAATCTTTTCCATGAAATTCCTTCTAGTTGCTGCTTTTGTGAGCGTGAATTTTTTACTTCTGCAGGACACA CAAATGTGGAGCATTTGAACTGAATGCTTGGGAAAGTGTGATGGGCAGGTGGAAGAAGAATAGGGATGAG GACTTATCCTCTATTCTTATCCTCCTAGACTTATCCTCCTAGTCTGCAAGCTTGAGAATATGGCATCAGG AATATGTGGCATTTTGTCCACACACACAGTGTTGGCAGGCTACCAGCAGCCCAGCTATCTGGACTAGGGG TGATGGATTTCTGTGGACAGAAGTCAAAAAGTAAAATTAGGAGGCAAAAATCTTCAGGGTGGCCATAAAG ACATTGTAACTTGTCTGGAAATTCCAACCAACACTAAATGTGTATCCAGTGATATACCAATAGACTGGCT TTTTTTTTGAAATGAAGTTTTGCTCTTGTTGCCCAGGCTGGAGTGTAATGGCACAATCTCAGCTCACTGC AACCTCCACCTCCCAGGTTCAAGCGATTGTCCTGCCTCATCCTCCCGAGTAGCTGGGATTACAGGCATGT GCCACCATGCCCGGCTAATTTTGTATTTTTAGTAGAGACGGGGTTTCTCCATGTTGGTTAGGCTGGTCTC AAACTCCCGACCTCAGGTGATCTGCCCACCTTGGCCTCCCAAAGTGCTGGGGTTACAGGCGTGAGCCACT GCGCCCGGCCTCAGAATCCTTTCACAGACATCATCTCATTTCACCCTCAGAGCACCGTGAAAAGGTACAG CACCAAATAGGTACCTGATTCTACTGAAGAAGATGTGGCAGCTCAGGGAGTTTGTGGATTTGTCTAAGAT TGCCTGGCTTTCAGGCAGAGCTGGGGCTAGAATGAATGTTCTGCTCTATCCATTGATAGAATATACATAA AGGTTGGAGTGCAGTGGCGTGATCTCGGCTCACCGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTG CCTCAGCCTTCTGAGTAGCTGGGTTTACAGGCAAGCGCTGCCACACCCGGCTAATTTTGTATTTTTAGTA GAGACTGGGTTTCTCCATGTTGGCCAGGCTGGTCCCGAACTCCTGATTTCAGGTGATCTGCCCACCTTGG CCTCTCAAAGTGCTGGGATTACAGGCATGAGCCACCCGCGCCCGGGTGACTGATTTCTTATTAACTAGAT TTTGGGAGCCCAAGGCGGGGGGGTCACGAGGTCAAGAGATCAAGACCATCCTGGCTAACATGGTGAAACC CCGTCTCTACTAAAAATAGAAAAATTAGCTGGGCATGGTGGCGGCACCTGTAGTCCCAGCTACTTGA GAGGCTGAGGCAGGAGAATGGCTGAACCCGGGAGGTGGAGCTTGCAGTGAGCCAAGATTGCACCACTGCA GTTTTTCTGCCATTTCTAGGGCCAAACTTTTTCTTGTCCATGAATCATTGTCAAAATTGGGAATTTTAAA ATCCCATGTGTACAAAAAGCTTTCTGGCTGAATTCAGATGTGACCTGAGAGGGCCAAATACAGGGGTGTG TGCTGGGAGAGAGAGAGGTCTCTGGACAGAAAACAAAGCCTGTTCACCACCCAGGATATGGACCAACT TTTTTTCCTGTTGTACCAGAACATTGTACTGAGGCCATGTTTGAACATTCAATCGATGTGTTGGGAAAAC TCTGCCCTACAATGTTAAAGAAATTAAATCTTTTGGGGAGTCTTTCCTTTGACCAGTTTATATCTCTGTT TTAGAGGAGGCTTCTCAACCAGAATGGGTTTGTTGACTTATTTTTACAGACCTCTGGTAGAAAGGAGGT $\tt CTTTTTTTGCTACCTGTTCTCCTGTCTCAGAGAACTATTACAATGGTGTAAGTTCATCATTTCTTCCCCTT$ TATTATGGCTCTGCTTAGGAAGAAAACTCTTTGCATTGGCTACCAAGTACCTAACTATTCAAGATGCCA AGCCTTTTAATGACTCTCCAGAAGTCAGTTCTCTAACTTTAATTATCATCCTTCTGGGGATATGTGGAAA TTCTACAGAAGTTGATTGGTGATATGTTGAGATGTGAGATCTGTATTTTCTAAGCAAAGTTGCCATGCAC CTGATTGATTGGCTAGGTGTATCCTGGCATTTGTCATTTGTTGGTGGGGTCTGATAGTTGGTTTCACCAC TGCTGGGTACCCAGAGTCATCACATCCATAGAGACAGAATGTAGGCTGGTGGTTGCCAGGGGCTGGGGGA AGGGAGGAGTGGGGAATTTGTTTAACAGAGAGTTTTAGTTTTGCAAGATGAAATGAGTTCTAGAGATTGG TTGCACAATAATGTGAATATCCTTAACACTACTGAACTTTATACTTAGAAATGGCTAAGATGGTAAGTTT TCACACCTGTAATCCCAGCACTTTGGGAGGCTAAGGCGGGCAGATCACTTGAGGTCAGGAGTTCAAGACC AGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCTGGCCTAATTGTGCATG TGAGCCGAGATCACACCACTGCACTCCAGCCTGGGTGACAGAGTGAGATTTCATTTCAAAACAAAAAA CCACTTTAGAAACTGCTAGTTTTGGCAATAGTTATCACTATATGTTTTATCCTGCATATTTTCTGTTAAG GGTCAACATGGTGAAACCCCATCTCTACTAAAAGTACAAAAAATTAGCTGGGCATGGTGGTAGGCACCTG TAATCCCAGCTACTAGGGAGGCTGAGGCAGGAGAAGCACTTGAAGTCAAGAGGCGGAGGTTGCAGTGAGC AAGTGGTACCACTTTGGTGTTAGTTCCTTATCATTTTACCTGGTCTGTCCTGCCTCTTCCTGGTACATTA GCTCCCTGAAGGCAGGGTGTATGTCCCAGAACTCCTTGAAGTCCCTTTTCTCAGCATACTACCATGCCTA CTGCAGCACCCCCATCTTTAATGTCCTTGACTTGGTGAAATATTACATTTTGAACACATTTCCTCACTT CCTTATGACAAATATTGATTGAGTTCAGTGCAAGGTGAGTAAGAAATGGTACTTGCTTTCAAGGAGCTA CTGTCACCTGGGCTGGAGTGCAGTGGCACGATCTCAGCTTAATGCAGCCTCCGCCTCCCAGATTCAGTGA TTCTCATGTCTTAGCCTCTCGAGTAGCTGGGACTACAGGCATGCACCACCACGCCTGGCTAACTTTTGTA TTTTTAGTGAAGATGGTGTTTCACCATCTTGGCCAGGCTGGCCTCAAACTCTTGACCTCATGTGATCCAC TGCTATGAGCAAAAAAAGTGTGAAGGTATAACAAGCCAACCACCTCACAATGCAGTTTGCATGTTTCTTA ATGGACATAGCAGGTTTTCTGTAAGAAAACAGCAGGAGATTCGTGTGGAATGATGGGTTGAGGCAACATA GTGGCATCCCTTGAATGCTCGAAGAATGTGACTTAGAGTTTGGTGGGAAGCAGAGAGCTGGGTTTTAAGA ACATGAATCTGACAACTCTATGGATCTGGAGGAGAAGCTAACTGGGGACGAGGAGCAGTAAGAAGCCTGT TACAGATGCACTGATAAGAAGTAATGAGAGCTGGCCGGGCACAGTGGCTCACGCCTGTAATCCCAGCACT TTGGGAGGCCGAGGCGGCAAATCACAAGGTCAGGATTTCAAGACGAGCCTGGCCAACATGGTGAAACGC TGCTGAGGCAGAAGAATCGCTTGAACCTGGAAGGTGGAGGTTGCAGTGAGCCGAGATTGCGCCACTGCAC TACTTCAAGATGGCAGCAAAAGACAGTGGAAAAAAGGCATTGGGAAAAAAAGCCAATGTGCCTTGATGAG TAAAGTTAACTGAGTCAAGGGGAGAAGTCAAAGGTAACTATGATGGGCTTTTTCTATTAACACAAATAGG AAATGAGTGGTTTTGGGAAAGAAAGTGATGAATTACCCCTCAGATATTGTATTAATTGTCTATTACTGTG GCCGGGCATGGTAGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAAACAGGCAGATCACTTGAGGT CAGGAGTTCGAGACCAGCCTGGCCAACACGGTGAAACCCTGTCTCTACTAAAAATTACAAAAATTAGTGTG GTGGTGTATGCCTGTAATCCCAGCTACTCAGGAGGCTGAGACATGATAATTGCTTGAACCTGGGAGGCAG AGATTGCAGTGAGCTGATATGGCGCCATTGCACTCCAGCCTAGGCAACAAGAGTGAAACTCCATCTCAAA TTTAGAGCATAAATTGAAGGGCACATTCAAAACTGATACGTAGGCCAGGCATGGTGACTTATGCCTGTAA TCCCAGCACTTTGGGAGACCGAGGCAGGTGGATCACTCGAGATCAGGAGTTTGAGACCAGCCTGGCCAAC GTGGTGAAACCCCATCCCTACTAAAAAATACAACAAATTAGCCAGTCACAGTGGTGCGCACCCATAGTCT CAGCTACTCGTGAGGCTGAGGCAGGAGAATCACTAGAACCTGGGAGGCAGGAGGTTGCAGTGAGCCGAGA TCATGCCACTGCACTCCAGCCTGGGTGACAGAGTGAGACCTTGTCTCAAAAAACAAAGACAAAACCAAAAC AAAACAAAACTGAGAAGCAACAGATTGATAAGTGACACAGTTACACTGGTCAGTCTCTTCAGCTAATACC TTTCTCTCTTTTTTTTTTTTTTTTTTTTTTTTGAGACAGGGTCTCACTCTATCACCCAGGCTGGAGCGC GGTGGCACAATCTCTGCTCACTACAACCTCTGCCTCCTGGGCTTGAGCAATCACACCTCAGCCTCTTGAG TAGCTGGGACAACAGGCACATGCCACCATTCCTGGCTAATTTTTAGTAGAGACGGGGTTTCACCATGTTG CCCAGGCTGGTCTCGAACTCCTGACCTCAAGTAATCTGCCCACCTCAGCCTCCCAAAGTATTGGGATTAC AGGCGTGAGCCACTACGCTTGGCCTCATAGCGTATTTTAATATTGGTTGAGACTAGCCTTGCTCATTGAT TGTTTTTTGGTTTTAAAGACTATTTTATAATAAATTTTCGTGATTAAACTCTTGTGCTTAAACTCTTGAT TAAACAAACAAGCAATGAAGAGATGAATGAAGCAGAAAATGTGAGTTTCATGCCTCACATTCCCACTCCT TAATGAAAATATTTAAATTTTCATAGTTAACAGCTGTAGCTCTAACTTGGCAATATCTTCTGTGTTTCTT TACAGCCATTATACTTGCCCACGAATCTTTGAGAACATTATAATGACCTTTGTGCCTCTTCTTGCAAGGT GCCACCATGAATATCCAGCCATGACATTCTATAGCCCTGCTGTGATGAATTACAGCATTCCCAGCAATGT CACTAACTTGGAAGGTGGGCCTGGTCGGCAGACCACAAGCCCAAATGTGTTGTGGCCAACACCTGGGCAC CTTTCTCCTTTAGTGGTCCATCGCCAGTTATCACATCTGTATGCGGAACCTCAAAAGAGTCCCTGGTGTG AAGCAAGATCGCTAGAACACCCTTACCTGTAAACAGGTAAGTCCAGTCTTCATTCTGAATTATAGTTGC TAGCCATTTCTCAAATCACTTTATGGTTGAGTGAGAAGGAAATAATATGTTAGACAAGGTCTTTATTGTA TTAATTACATAGTTTACTTACAGCACCCAAAACACAGGATGCCCTGTTCTATTCTGATATTTTAGTTCTC ATTAAAAACTGGTATGTGTACATCAGTGTTGTGGGGAGAATTTGCTATCATGACTATTGTCTTTATACAG TAAATACTGAACTTAAGTCACTCCTTTTCTTTTTTTGAGACAGGGTCTCGCTCTGTCACTCAGACTGGAG TATAATGGCACGATTGCGGCTCACTGCAACCTTCACCTCCTGGGTTCAAGCAATTCTCGTGCCTTAGTCT CCCGAGTAGCTGGGATTACAGGCGCGTGCCACCACGCCCAGCTCATTTTTTAAATTTTTAGTAGAGACAG GGTTTCACCATGTTGGCTAGGCTGGTCTTGAACTCCTGACCTCAAATGATCCACCTGCCTTGGCCTCCCA AAGTGCTGGGATTACAGACGTGATGAACACTGTGCCTGGTCTGAACTTAAGTCACTCTTAATGGAGTTAT TTGGATTTGAAAAATGAATTTTTACTTTACTTTCAGTTTCAAAGTCTTCTTATAGTGAAACCACAATTTA ATGTTCATGACAAATTGTTTCCAGGATAAAAGTAACTGTGATAGTATTACAACTTAAATGAAATTCTAGA CATGCGAAGCATGAAAAGATAGATTGGTATAAGCTTTTTAACCATGAACTAAAATAATAACATTATA TAAAGATTGGTGGAAACTATTGAAGTTTAGGCTTCAGTTGACATTCCCTGAAGTTAAAAAGGATATGTGT ACTCTTTAAATGCAAGGTAACATAATGGATTATTTCCATCTAATTATTAATATTTCTAATGATAATCATA GGTATGAAGGGAATGGATAGTATAATGAGAAAGGAGAGGGGGAGATAAAAATCTAAAAGTACTAAGGGCA TGTTGGATATTGAAATTCACTACTTTCAAATATTATCATAAAACTTTGAGACAGTAACATTGCACCATTA TTTTTCTTCTTTTAAAAACATTTTACTCATTGGTAAAGAGAATATAAACATTGTGGATAACTTTTTTAAA GTAATGGTTTGTTTTTTTTTTCTCCTTCCTCCTTTAAAGGAAGACATATTTTGTTTCTGAGCATGAATTA TAATCAAAGTTCTGCTAATTTTTGGGCAAATTAATCCATTATATAATTACCTTCATTTATAAATCAATAA TACCTTTACCATTCCCTTTCCAAAAGAACCATGCCTGGCAACATCAGGAACTAGCCAGATGTGTTTTGGA GGCTGCCTGGGGATCCCTTGTTAGACTTTTCGTTCCTTTATGAACCTCTTGCCTGTGGTCCAGCATTGAG TTTCTCTCTCCCCTTTCTCTCTCTCCCCCTTTTTCTTGTCTCACATTCATCTCAAGGTAACTTAAAGTC $\tt CTGGAGTGCACAGTCTTGGCTCACTGCAACCTCTGCCTCCCGGGTTCAAGCAATCTCCTGCTTC$ ATAGGGTTTCACCTTGTTGGCCAAGCTGGTCTCGAACTTCTGGCCTCAGGTGATACGCCCACCTTGGCTC $\verb|CCCAATGTGCTAGGATTACAGGCATGAACCATTGCGCCCAACCTGAAAGTTATTTTAAATCTAGACCTTT| \\$ ATCTGAAATTGCAGAGTGTGAGATGTTTGTTCTCCATTTAAATGGGAACTTCAAATGTCTGAAGGGCTGC GATCTGGCCACTCCTTTCATTACACTTAGAGATGTAGCTCCCACCCCATGGCTATGACTGGTCTTCGGCA GTGACAAATGCTCATCAGCATCACGTGGATGGGCATAAACTCACCTACCCACTTTCAAACATTAGTCATT CCCCACAGCGTGGCTCTTTGTAGATATGATATCAGTATCAAAAGCTTTGCTGTATCAGATTTCCGGGAAT AAAGCCCTTCCTTTCCCTTTTATGCTCTGTTCAATGGATATTTTCTTTGCTCCCTAGAGAGACACTGAAA AGGAAGGTTAGTGGGAACCGTTGCGCCAGCCCTGTTACTGGTCCAGGTTCAAAGAGGGATGCTCACTTCT GCGCTGTCTGCAGCGATTACGCATCGGGATATCACTATGGAGTCTGGTCGTGTGAAGGATGTAAGGCCTT TTTTAAAAGAAGCATTCAAGGTACAAGAGAATTGTTAACTGCTTCTTTAGTTTCCTACTTTTGATTTCAA ACAATTTTGCAGAGATGACTTGGCAGAAATGTCACTACTGGCCTGTTTGGCACACAAAGTATTTGATGAG AACCCCAAGATTATACAGCCAACTCGAATGGGTCTTACCCCTCGTTCACCCACATGGGTGTTGGATAGAA GACATCGAGTTACAACCTTGTGAAGATGTCTCTTGGAAAAAATGTGCTCACAAGGAGTTGCAAAGATTGT GAAAGAATAAACACATTTTTTGGAAATGGTCAGAAATCAGGAATTCAGCTACAGTGGACTTTGAGAATTG ATCTAGACACATTTCTTCCCCTAGGCTAGGAGGGTCTCAGTTCACAATCCCCTTGTTTTCTGGGCTGTGT AGAATCAAACTCTGTAAAATATTTGAAGAGATTTATTCTGAGCCAAATATGAGTGACAAATGGCCTGTGA CATAGCCCTCAGGAGATCTGAGAACATGTGCCCAAGGTGGTCAGGCCACAACTTGGTCTTATACATTTTA GGGAGACATAAGGCATTAATCAATGCATGTAAGATGTACATTGATTCAGCCTGAAAAGGCAGGACACCTG TCAGTAGGAAGCAATGATTGGGTTACAATAAGGGATTGTGGAGACCAAGGTTTTATCATGCAGATGAAGC CTCCAGGTAGCAGGCTTCAGAGAGAATAGATTGTAAATATTTCTTAGGGGTCTTAAAGGGTCTGTTCTAT CTTATTTTTCAGGTTAACTTTGTAATGCCCTTGGCCAAGAGGGGGGCCCATTCAGATGGTTGAGGGGCC TTAGAATTTTATTTTTTGGTTTATAAACTTCAAGTTGTGCACCCCTGATTTCAAGGCTGGTCAGCTCATC TCCCTGCATGTGTCTTTGCTACACTCCTTCTCTCGTACCAGCCCTGATTTGCTGAAGTCACTTTCTTGCT TCCATCTGAAAGCTCCCTTCCTTTTCTATCAAAGCCCCAATGCTTTGTTCTTTGCCAGTTAAGAAAAGC AACGTTGAGAGAATTCATAGTGTGTAAATGGCAAATAGCAATTTACTAAATTAACTCACCCATTGATAAC TCTAAGAGGATGTTTTACCTTAAGCAGAGAAATACTGATAGAATCCAGGATATGGTGAGGAGTGAAATGT TGGTAGTCACCTTCCTACCTGTCCCCTGAAATTCACCCTGTATGAATGGCAGCCTCTTTGTCCTGGATTT TATAATTACTAGCTCTGCGACTTCACCTCCTAGCCTGTTTCCTCCTCTGTGAAATGGAGATACTCATAGG GATTTTCTAAAGATGAAATAAGGTTGATTATATGAAAACATATTCAGTGCTCAAATATTTTATTTGTGAC AATCTTAACAGTAGATTATAAGGCCAAGTCCATTTCCTGGCTATATGATAAGAACAATATTGATTTCTG AAATTCTGAACTGAATTCTTGATACGATGACTATTTTGTATCTTGCTGAGTTTCTAGGATTTTACCCCTT TGGGGAAACATTGGTCTGCTTGAAACATCTTTGACCCCTGAGACTACAGCTAATAACAATTGAAAGTAAA TTTCCTTTGCTTCTTATGTTGTTTCTTCCTTCCTGCTGCATCAGACAGGAATGTCAAATTCTAAATGTG TTCCTGTCTTTGATATAAGTGCATTACAGTAACTGAAAGTGGCCACTTATTTTTAAAATTGTCTCAAATA TGGAGTCTCATTCTGTCACCCAGGCTGGAGTGCAGTGGCACAATCTCGGCTCACTGCAAGCTCTGCCTCC CAGATTCACACCATTCTCCTGCCTCAGACTCCCAAGTAGCTGGGATTACAGGAGCTGGCCACCACACCCT GCTAATTTTTTGTATTTTAGTAGAGACAGGGTTTCGGCATGTTAGCCAGGATGGTCTCGATCTCCTGAC CTTGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACCGCACCTGGCCCAT TCTTATGTTTTTTATAATTTTAAACTTGTCTTGCTAACTTGATTTATAAGCTAATTGACCATATCTTAGT TGTTGGCTTCTTCACACAATGAGTTGCCATCAGAGTGATAAGTGCTGTTGTTTCTCTACTGGGTTATGGA GCACAGAGGAAGGACATAGGGAGAAGGACCTCATCACTTCATCTGGTCCAGATGACAGCATGGCTTA ATTGTACCAGGCTCTACGGATGCAGTGGTGAACAAGACAATAGATTATAGATTCCATGAGGGCAAGGATT ATACACAGAGTTCTGTATCATTTTTCACTTAATATTGTCGTATAAGCATTTCTGTTGTTAAATTTCCAGA ATTATTGAAGGCCCTATCAATTATTTTCATTGTTTTAATGCTATGGTTACTTTATTTGTTCATGAAGTTT TGAAAAAAATAAGTTTCTCTGGATATGTTTTTAGAACAAATCTGTGGGGTCAGAGTGCATTAATGTTTAA AGTTCTTGACAGATGTTTTCAAGTGTTCAAGTCTTAAGAAGGTTGTACAGACTTGCTCTTTTACCAGCAG TGTGAGTGTCGCTTTTTCCAACCTCTTGGTAGCATTGACTCTTATCAAAAAGAAAAAAACCTTGCTACAT TGATACGTGATGTATAGTATCTTTTGGTTTCAATTTGCTTCTCTTTATTAGTGAGGTAAATGTTTTCTCA TAAATCTATCTGCCATTTGTATTTTCTCTTTTATCTTCTTTATTCAGAGATTTTGCCCCGTTTTTATATTG GGTTCTGGCATTTGCTTGATAAATTTATTGTGTGCTTTATATATTAACCTATTATTACATGTATGACAAA TATTTTTTCCACTTGACTCTGATTTTGATATGCAGAAATAGTTAAATCTTTAAATAGTCAAATATTACCAA CTTTGATAGTTTTGTGTATAGTTTTTAAGCCTAAAAAAAGTCCTTTCATACCCAGGCATTATATAAACTT GCATACTGAATGAAATAACCAAATGTATTTATCTCTCGTTAATTTTCTCCACATCATTTTACTTAATAAA TCCATTCATTTTCATTGATTTAAAATATGGGAGCCAATTTTTAAAAGTTGAGTTTGAGATATAATATGC ACTGTTAATTGTGGTTTGTAACCTCATATTTTGAGTAGAAAGTCTAAAGGAAGAACCAATGAAAAACAAT AACTACAACTTTTTTTTTTTTTTTTTTGAGACAGAGTCTCACTCTGTCATCCAGGCTGGAGTGTAATGG TGCAATCTCGGCTCACTGAAACCTCCGACTCCCAGGTTCAAGGGATTCTCCTGCCTCAGCCTCCCAAGTA GCTGGGATTACAGACACCCACCACCACGCCTGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACC ATATTGGCCAGGCTGGTCTCGAACTCCTGACCTCAGGAGATCAGCCCACCTCAGACACATGTAGATTGAA AATAAAGGGATGGAAAAATATTTCATGCAAATGGAAACCAAAAAAGAGCAGGAGTGGCTATACTTAGACC AGACCAAATAGAGTTCAAGACAAAAACTATAAAAAGGAGACAAAAAAGGTCACTAATAATAAAGATGTCAA TTCAGCAAGAGAATATAACAATTGTAAATATGTCTGGAGCACACAGATATATAAAGCAAATATTATTAGA GCTAAAGAGAGAGACAGACTGATATGGTAATAGCTGGACACTTTAACACTCCACTTTCAGCATCGAACAG ATCATCCAGACACAAAATCAACAAAGAAATGTCAGATTTAATCTGCACTAAAGACCAAATGGACCTAATA GATATTTACAGAATATTTCATCCAGTGGCTGCAACATACACATTCTTTTCCTCAGCACATGGATCATTCT GAAGGATATACCATATATTAGGCCACAAGACAAGTGTTAAAACATTCAAAAAAACTGGAATCAAATCAAG CACCTTCTTTGACCACAATGGAATAAAACTAGAAATCAATAAAGAATTTTGGAAACTATACAAACATGGA AATTAAACCATATACTCCTGAACAACCAGTGTGTCAATGAAGAAATTAAGAAGGAAATTAAAAATTTCTT GAAACAAATGGTAATGGAAACAACATACCAAAACCTATAGGATACAGTGAAAGCAGTACTAAGAGGAAAG TTTATAGCTTAAGTGCCTACATCTAAAAAGTAGAAAATCTTGAAGTAAACAACTTAATGATGTATCTTAA AGAACTAGAAAAGCAAGAGCAAAGCCAAAACCCAAAATTAATAGAAGAAAAGAAATATTCATAAAAAAGATCA AAGCAGAAATAAATGAAATTGAAACCAAGAAAACAACACAAAAGATTGACAAAATATGAAGGTTTTTTTG TCAGATGAAAAAGGAGATGTTACAACTGATACCGCAGAAATCTAAAGGATCATTATAGGCTATTATAAGC GATTGAACTATGAAGAAATCCGAAACCTGAACATACCAGTAACAAGTAACAAGATTGAAGCTGTTATAAA AAGCCTCCCAGCAAGCTGGGCACAATGGCTCATACCTATAATCCCAGCACTTTGGGAAGCCAAGGCAGGA GGATCACCTTAACCCAGGAGTTCAAGATTAGCCTGGACAACACACAGAGATCCCTATCTCTACAAAAAA AAAAAATTACAAATTAGCCAGGTGTGGTGGTATGCATCTGTAGTCCCAGCTCTTCAGGAGGCTGAGGTG GGAGGATAGCTTGGGACCGGGAAGTCAAGACTGTGGTAAGACAAGATTGCACCACTGCATTCTAGCCTGG GGCTTCATCCAGAATTTTACCAAACATTTAAAGAAGAACTAATGCCAATCCTATTCAAACAATTCTGAAA AATAGAGAAGGAGGAGGAATAATTTCAAAATCATTCCGTGAGACCAGTATTACCGTGATACCAGAACCA AAGAAACATCAAAAGAATATGACAGACCAATATCCCCCAATGAATATTGATGTAAAAATCCTCAATAAAAT ACAAACCAAATGCAACAACACGTTAAAAAGATTATTCATCATAACCAGGTGGAATTTATCCCAGGGATGC AAGGATGGTTCAACATATGCAAATTAATTTGATGCACCATATCGACAGAATGAAGGTGGAAAACCATATA ATTTCAATTGATGCTGAAAAGGCATTTGATAAAATTCAACATCCCTTCATGATAAAAAACCCTTAAAAAAC TGGGTATAGACAGAATATACCTCAGCCCAATAACAGACATATAACAGACCCACAGCTAGTATCACACTTA ATGGAGAAAAACTGAAAGCCTTTCCTCTATATGGAACATGACGAGGATGCCCACTTTCACCACTGTTATT CAACATAGTACTGGAAGTCCTAGCTAGAGCAATCAGAAAAGAGAAATAAAGGGCATCTAAATTGGAAAGG

AAGAAGTCTAATTATCCTAGTTTGCTGATGATCTTATATTTGGAAAAATTGAAAAATTCCACCAAAAAAC TATTAGATCTAATAAATTCAGTAAAGTTGCAGGATCAGTAGCATTTCTATATGCCAACAGCAAACAATCT GAAAAAAAAATCTAAAGTGATCTCATTTACAGTAGCTACAAATAAAATACCTGGGAATTAACCAAATAAG GATATTCCATGTTCATGGAATGGAGGAATTAATATGTCCATACTACCCAAAGCAATCTACAGATTCAGTG CAATTTTATCAAAATACCAATGATATTTTCACAGAAATAGAAAAAACAACCCTAAAATTTGTATGGAACC ACAAAAGATCCAGAATAACCAAAGCTATTCTGAGCAAAAATATCAAAACTGTGGAAGAATCACATTACCT GACTATAAATTATACCATAGAGCTATAGCAACCAAAACAACGTGGTACTAGCCTAAAACAGACATAGGGA TCAATGGAACAGAATAGAGAACCCAGAAACAAATCCATACATCTACAGTTAACTCATTTTTGAAAATAGT CTCTTCAATAAATGGTGCTGGGAAAACTGGATATCCATGTACAGAAGAATAAAACTAGATCCCTATCTCT CACCATATACAAAAATCAAGTCCAGATGGATCAGTGACTTAAATCTAAGGCCTCAAACTATGAAACTACT AAGCACAGGCAACCAAAGTAAAAGTGGACAAATGGAATCACATCAAGTTAAAAAACTGCTTGCATGGCAA AGGAACAATCAATGAAGTGAAGAGACAACACACAGAATGGGAGAAAATATCTGCAAACATCTGACAAGGT ATTAACAATCAGAATATAGAAGGAGCTCAAACAACTCTACAAAAAAACTTAAAAATCCAATTTAAAAATG GGCAAAAGAGCTGAGTAAACATTTCTCAAAAGAAGATGTACAAATGGCAAATGGGTATATGAAAAGGAGT TCAACATCATTAATTATCAGAGAAATGCAAATCAAAACTACAATGAGATACCATCTTACCCCAAAGTAGC TTATATCCAAAAGATGGGCAATAACAAATGCTAGTGAGGATGTAGAGAAAAGGGAACCCTGGTATACTGT TGGTCAGATTGTAAATTAGTACAACTACTATGGAGAACAGTTTGAAGTTTCCTCAAAAAACTACAAATAG AGATGTCTGCAGTCCCATGTTTGTTGCAGCGCTGTTCACAATAGCCAAGATTTGGAAGCAACCTAAGTGT AGATCCTGTCACTTGCAACAACACAGATGCAACTGGAGGTCATGTTAAGTGAAATAACCAGACACACAAA GACAAACCTCCCATGTTCTCACTTATTTGTGGGAGCTAAAAATAAAAACAATTGCAGTGCCTCATGCCTG TAATCCTAGCACTTTGGGAGGTCGAGGCAGGCAGATTGCCTGAGCTCAGGAGTTCGAGACCAGCTTGGGC AACACGGTGAAACCCTGTCTCTACTAAAATACAAAAAATTAGCTGGGTGTGGCGGCATGCGCCTGTAGTC CCAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAGTCGAGA TCATGCCACTGAACTCCAGCCTGGGTGACAGAGAGAGACTCCGTCTCCAAAAAAAGAAAAAGAAAAGAAAAAC GTGGGAGTCCCAGCTACATGGGAGGCTGAGATGGGAGGATTGCTTAAGCTCAGGAGGTGGAGGTTGCAGT GATGATAAATCAAAGTATTTTAATAAAATTGGGCCATACTAGAGATGTTATTGTTTGAAATCAAATATAT GAAGTATAGTTAATAATATAAGTGTAATAGAAGAAAAGGAGCCTTAGAAAAGCTTGAAAAACATCGTTGTA CTTTGCAACATGAGAGATTCATGTAGATCTAAGAGACTGTGAAGACTGTTTCAATATTGGAGTTACAATT AGCTTTTTAATTACCTCTTCTGGCCAGCTGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGACCA AGGCGGGTGGATCACCTGAGGTCAGGAATTCGAGACCAGACTGGCCAACACGGCCAAACCCCGTCTCTAC TAAAAATACAAAAATTAGCTGGGCGTGGTGGTGGTGCCTGAATCCCAGCTATTTGGGAGGCTGAGGCAG GAGTATCACTTGAACCCGGGGGGCAGAGGTTGCAGTGAGTCGAGATCGTGCCACTGCGCTCTAACCTAGG CAACAGAGGAAGGTTCTGTCTCAAAAAAAAAAAATTACCTTTTCATTGTTTGCTAATGTGTAGAATTCT GCATGTAACATGTCCAGTTTAAAGAATGATTATAGAGCAAATCCCTGTGTAACCAGCGCTCAAACAATGA AATAGAATATAATGGCAGCCCAGAATCCCTTTGGGTGGTCCCTCCTGCCACACCTACTTCCCTCCTGCA GAGGTGGGACAGTCCTCCTTCTGCCTTCCTTGCTGTGTATGGTTTTACCACCTACACGTGCATCCCTAA ACGATGCAGGTTGATTTTCTCTGTTTTTGAACTTTATGTGTTCATGTCTTCTACATATATTTTGTGACTT TTTTCTTTTATGACTTGCTCATTTCATTTATCATTGAGATTCATTTATTCTCCGCACTGAAATTCTGGTT CATTATAGGCTTAATGTAAGATGTTGAGGCCATATTGTTTATTAGAAAGGCACTAAAATGCCCTATTCAC TTTCACTTTTGCTTCTCATCTATTTTATTATAATTTCTATTTCTTAACCCTTTCTCAAACCCATGTAGCT GTCCTCATCCTCCCTACCAACACCCCATCCAGACATCTCTCATTTGCACAACTACAGCAGGCTGTCATCT GGTCTCCTGGCCTCATCAGTTTTGCTGCCTCTGATTGGTTCTTCGTACTGCATCTGAAATAATTTTTGAA ATATAAATATTCTTAGCTCTTCCTTGCATAAGAGAATTAAAAGTACCATTGTCTTAGAGATTGCTATATA ACTAACAAGTTCAAACTCTTAGGATTTTACTACAATGGGCCTTATTTTCTGTACTTCTGTGTCTTTGAGT TGTTTAGAGTAGCTCTACTTCATAAACTTGGTTCTGGGCTTTTGTGGGAGGTCAGGTCTGTTCCACATGT CCCCACGTTCTTCTTGGACCAGTGGCTACCTCACAGGAGCTCAAGAGGCCAAGCCAAACTGTTGGAGCAG CACATCTATTGATATATCATTGGCTATAAAAAGTCCTGTGGTCAAGCCCAACATCAACTGGTAGGGAAGT GTTTGCTCTCTGCGCACTCTAGTACACTGCAGGGTCGCAAGGCTGAGGCAGAGAATGAAGAATTGAGAAC GGTAATCCACCACAACTCTTGTCAATAGCAGTACTTTCTGTCATTATTTAGATTGCTAATTTCTTTATTT GTTCCTTTTGTTATTTTATTTGACTATGAATTCCCATAAAAATATTGTATTAAACCCGAAAGAGGGATAT ATGTAAAAGAATATAAGAAGTTGAATTTGATGACTTGATTTACAACTCTTGAGTTCTGTGACTTGGAGCA AATCAATTTAATGTTAGTCTTATTTTCCACATCCAAAGGATATATTTTTATATCTCTCTTTTGAGAATTC TAAGAATATGCAGAGAATAACATATTAGTAAAAAACCAGGATATTGAAATGTTCCTAGGTCTCCTTTACT CATTAACAAGGTGACAATGTAGCTTGACTTTGGCTTTGTACCTGTACTGGTCATTAAGAAGATGTCCCCT ATCTCTCAGCTGGAAAGTGTTATCAGTGTTGTTGACCAGGAAGAGATTTAACTAAGAGATCATAGCAATA ATCTTTTTTCCCTCCCACTCTGCTATAGGACATAATGATTATATTTGTCCAGCTACAAATCAGTGTACA ATCGATAAAAACCGGCGCAAGAGCTGCCAGGCCTGCCGACTTCGGAAGTGTTACGAAGTGGGAATGGTGA AGTGTGGTGAGTGCTTGCTTCCCTTCTTATTGAATATGGGCCTTGCTAAAAGCCCTGTCCTCTGAGGAAC TGGGGACAGGTAGCCGGGAAAAGAGAAGATTTGGGACATAGTAATTAAGTATTTGCGTGTTGTCACATTG GAGGGGCATTGACTTATCCACAGTAACTGCAGAGGACAGACTGGGGTGAATGGGAACAGATTATGGGA GGCAGATTTTGGCCCCAGGTAGAGAAGAGCTTTCTAGAGTTCAAGTGGTCTGACCACAGAATAGGCCACC GAAAAGTCCAGTTCTAAGGATGAAGTCGTGGTAAATGTCCATGGTTAAAACTCGTGACAAAAAAAGTAGGA TATCTTGTGGGTTACTGGGGTAGCCATGGGGAGGCTCACACCTATCCCCTCGTCTAGCTTTCTAGAAGTA

TCACATACATTCGCATATATTTTATGCACAAAGAAAGTGAGCACTTTGGTATATAACTGACAAAGATGC ACTCAGAGCAGTTCTGCCTGCACTTATTCTTCTGCTAGCCAGTATTTTACCTGTGGTTAATTGTAATTTC TTTTTTTGAGATGGAGTCTCGCTCTGTCACCCAGACTGGAGTGCAGTGGCCCATTCTCAGCCCACTACAA GCTCTGCCTCCCGGGTTCACATCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCACCCAC GCCACTGTACCCAGCCCTCCCTGACAATTTCTTAGTAGCTTTGCCTTGTGAGCATTCTCTGCCCTTTTCT TTTCTCTGTGTATGTAACAGATTAGAACCCTCAGCTATTATAGTTCAGTTACAGCAGAAGTTCTCTTCAT $\tt CTGATCATGCTTCTCTGGCTTCCTAGAGTCACTGATGATCTTCATTTCCTCTGTAGAACATCCTGCCAGT$ GCCCATAGCCTCACAGCGTGTATTATTGGTTATTCTCTCAAACACCTAAACATTTCCATTCCCACCGCTT AAGTTTAGTTAAGGCCGGGTGCGTTGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCATGCA AATCATGAGGTCAAGAGATCAAGACCATCCTGGTCAACAGGGTGAAACCTTGTCTCCACTAAAAATACAA TGAACCTGGGAGGTGGAGCTTGCAGTGAGCCGAGATCGCGCCACTACACTCCAGCCTGGTGACAGAGTGA GACTCTGTCTGGGGGGGGGGGGGGGGGGAGGAAGTTTAGTTGAAAGTTTTGAATAAAATCTTAAAGGACTAAT AGCTATTGAGATAGGTATGGGTGAGACTGGGGGAAAAAAACCCATAAACCTTGGGAGATCCTGAATTCAG AATTCTTTAGAAGTATCTAGGTTCTTGCTCTGTTTTTTGTTTTAAAGAGGCTGAAACTGAAAATCCAGAGA TAATATCTTATGTGTATGTTTATGCAGAAAAGTGACTTTGTCTAATTGGCCCAGATGCTTAAAGAGAAAG CCTTGGCACTCTGACAAAAGATTGCAAATAAATGTTTTAAGTTTAAGTTAAACTATTTTAAAGTGAGTA TGTGTGTGTGTTTAAAAAATGATTTCCAAGTTAGTCTTAAGAATGCTTTTATTATACTAGGATCCGTTGC ACAGCTATTGCCCTCATGGCTCAAGGCAGTGTATGCAGGGAAGAGCATGGAGGTTGGATCCCATAGAGTC TATGTTTCATTTCGTTTCATCACCTTCCTGCTGACTGTAACTGTGCTCAAACTACTGAATCACCTCTTTG GCCCTTGGTTTTCATGTCTCTGAACAGAGATATCTGCTTCACTTGGTTTTGTGAACAATAAGTATGAAAA AAAAACTCATATGAGCTTTGATACAACACTGTTTCATGAGACAGAGTACAGAGGGATAGTTAAAGAAGCT TTCATAGAAAAGGGAATGAGAAAAGGTTGTTGTATTTAGCCAGAAAGTCTAAGAAAAGACTGTATTCTC TTTGGAGATTATGGAAGAATGAGATGGGTTGTTGCACATATACAATGGGATATTTTGCCCTTCACTGAC TGCCTTCCCCAAAACCCTCTATGCATGCTTTTTCTTCTATCAGGTTTGGAGGACTAGAGATTCTACCTGC TTGTTGGATCCTCCTGCACCATCCTGCTTCTTTTATTTTGAAACCATGTAGTCTGTTATCACCCTTTTCT TCTGAATTTCTGATCTTGTCTTTTCTACTGAAGTATGGATGTGGTCATATAATGGTAGGACAACACCCAC $\tt CTAGACTAACTTTATGGATGAAACTTCATTATAAGGATATACTGAAATGTAAGGAGCCAGGAAATCCCTC$ TGAATAGCCATGTATTTGGCCTATATCCCCATATTGGGACAATAGCTCAACATATTTTGGGTGCCATATC TTTATATACCTGCTGTATACTCTTCTGTGAAAGGGATTTGATAGGTGGGTAGTATAAAATAGTGGTTAAA ${\tt AGCACCAGCTCTGGATTTAGGCTACTGCTTGGGTTTAGATCCTGCTTCTGCTATTTTCTAGCTGTGCCAT}$ CTTAGACAAGTTATTTGAGCTTATGTTTGGTTCCTCTTCTGTACATTGGAGACAGTAATAGTTCCTGTAC TGTAGGGTAGCTGTCAGGACATGTGCAATATGCAATGCCTGGTGCATAGAAGCTTCCAGTAGACATTAGC TGCCATTTAGTGTCATTTATCACTACGATCATCATCATCTTTGGCTGGGGCTATTTACCACTGCCTAATA AGCCACAACACTAGAAACATCCTTGATAGAAAAATGAGCTCCTTGTCAAGGGCTTTATTGAGTCTAGAAC CCCCAGAATTCACTACAGGACCTAGAATGTTAGACTTTGTCAGTGAAAATTTGTCAAGTAAATTTGAACG TATGAATTCAAAATCTCTCACTTTGGGTATGTAAAGGGTATATAAATCTGTTTTGTAAATTCCTTATCCT TTTTGAGACAGGGTATCACTCTGCTGCAGCCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTTACTGCAA CTTTTACCTCCTCGGGCTCAATTGATTCTCCCACCTCAGCCTCCGAGTAGCTGGGACTACAGGTGTGTG CACCACCATGCCTGGCTAATTTTTGTATTTTTTGTAGAGACAGGATTTCACTATGTTGCCCAGGCTAGTC TTCAACTCCTGGGCTCAAGTGATCCCCTTGCCTCAGCCTCTCAAAGTGCTGGGGGGATTACAGGCATGAGC CACCTTGCCTAGCAGAAAGGTGCTTTTTAAAACTATACATTTTGCAGCAAACCGCCATGGCATGTGCATA CCTATGTAACAAACCTGCATGTTCTGCACATGTATCCCAGAACCTAAAGTATATTAAAAAAATTAAGAAA AACATACATTTTGCTCCATTTTATCCTGGGTGTATAATTGACCTTAGCATTCTGCTTGATTACTAATAAA CCTTTCTTCTACTATAACTAGTCAATGTTAAGAGGAAATTCTGACAAATTTTCCTGGGAGCCAATAATTT AAATTTGCTCACATTTTCTAACTAATATTTATTTTTAAAAAATGTAAACAATTGATTTAGTGAATAAACAT AATGATGGGTGTATAAAACCAAGCATTTTGCAGATTTCAACTTTTAGGGTTTCTTTTTTTAAGGGAAATT TTTTTTGTCTTTAACCGATGAAAACTTATAAAGATGTTGGTGCTCAAATGTATAGGGATTTGGAAGTTAT ATTTTTGTTGTTGATTTCCATTTTTCTTATCGTCAGAGAATATGATCTGAATAATACCTATTTTAAGATT TTCTTCATTGCCTAGCATGTGATAATTTTTGCAAAATATCTATGGCCTTTGTAGATCAAGCTTGTTAATT $\tt GTTATAATACTGCATCTGTCAGTTTCTCTTTTTCTTTCAGTTACTTTTTGTATTGTGTTTTGGAGGCTGTG$ TTTTATTGTTTGTCTATTTATTTATTTATTTATTTATTTTTTCAACCCAAGTCTTGCTCTGTCACCCAGG $\tt CTGGAGTGCATGGCACGGTTCACTGTGCCTCCTGGGTTTGTGCGACTCTCCTGCCTCAGCCTCT$ TGAGTAGCTGGGACTACAGGAATGCACCACCATGCCTGGGTAATTTTTGTATTTGTAGTAGAGATGGGGT TTTTCCATTTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCGCCCACCTTGGCCTCCCAAAT $\tt TGCTGGGATTACAGGCATGAGCCACCTGGCCTTTGTTGTTTTTGAAGTATATGAGTTTAGAATTAT$

TTATCTTTTTAAAATATTCTAGCGATGAGTCTCCTTATCTATAATAATAATTTTTGCCTTAAAGTTTATT TGTCTGGTATCAATAGAGTAATGTCAATTTATTTGGTTAATTTTGCCTGTTAAATATTTTTCTATCTGTC TACTTTGTTTTTCTATATGTTAGGTATATCTCTTACACCTAATCTATGTCTAGATTTAAAAATATGTATA GATCACATTTTTATGTTTTCTTTTTTTTTTTTTTTTTAAAAGTCATACATTCTGTTTCAATTCCCT TTTATCTTTTGAGACAGAGTCTCGCTGTGTCACCCAGGCTGGAGTGCAGTGGTGTGATCTTGGCTCACTG CAGCCTCTGCCTCCCAGGTTCAAGTGATTCTCCTGCCTCACCTTCCTAAACAGCTAGGATTACAGGCATT TGCCACCATGCCCAGCTAATTTTTGTATTATTAGTAGAGATGGGGTTTCACCATGCTGCCCAGGTTGGTC TTGAACTCCTGGCCTCAAGTGATCCGTCCCCTCCCGCCCACCCGCCGAAACCACCTTTGGCCTCCTAAA $\tt GTTCTGGGATTACAAGTGTGAGCCACCATGTTTGGCCATGTTTCAATTCCTTTAATGACGTTTATGTTTT$ GTAACGTGTTCTTGATTAATTTGAGAATTTAAGCTTCTATCTTCCCAAAAAAGAATCTTAGAAATTCTAA TAAAACTTAATTCTTGGGCCGGATGTGGTGGCTTATGCCTGTAATCCCAGCACTTTCAGAGGCCAAGGCA GGAGGATCACTTGAGCCCAGGAATTCGAGACCAGCCTGGGCAACATGGTGAGACCCTGTCTTTACAAAAA ATACAAAAATTAGTCAGATGTGGTGGTGCACACTTGTAGTCCCAGCTATCCAGGAGGCTGAGGTGGGAGG ATCTCTTGAGCCTGGGAGGTTGAGGCTGCAGTGAGCTGTGATCATGACTGTACCACCATACTTCAGCCTG TTTTTAATGCCCAATGGGTTCTGAGAAAACAGTCAAACTATTGAGGACTGGGTAACATAGTAAGACCCTA GTTCTACAAAAAATTTAAAAGTTAGCTGGGCATGGTGGCATATTCCTGTAGTCCCAGCTACTCAGGAGG CTGAGGCAGGAGGATTGCTTGAGTCCAGGAGATGAAGGCTGCAGTGAGCTATGATTGCATCATTACACTC CAGCTTGGGCAACAGAGCAGGACTCTGTCTCAAAAATACAATTAAAATAGTGTAGATACTACAATCTAAT TTTGTGTATAAAGGCTGGGTGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGATGGGCA GATCACTTGAGAATCAGGAATTTGAGAGCAGCCTGGCCAACATGGTGAAATCACATCTCTACTAAAAATA TAAAAATTAGCCAGGCATGGTGGCGGGCTCCTGTAATCCCAGCTACTTGGGAGGCTAAGGCAGGAGAATC GCTTGAACCCGGGAGGCTGAAGTTGCAGTGAGCCAAGAATGTGCCACTGAACTGCAGCCTGGGTGACAGA CCATAGTCCTAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGTAGGCGGAGCTTGCAGTG AAGAAAAAGAAAAATAAAAGCATTAAAAAGACTGAAAGAGTTTATGCCAAAATTTATTCTCTTCTATAT TTTTCAGATTTTTCACTTAATTTGTTATTTGAAATATACTTGTTTTGTGTAAGTATAAGGAAATATATA CATATGCACACATGCATATAAACATTTTAAGAATGTGTTATAATAAAAGTATATTATTTGATACCTTTGG AAATATCCCCATTTTTCTACCTGAAGAAAATTCCTAATTTCATGGTTTGGAAACAGGTTTATGAGCACTC TTTATAGAGAAACGGTGTTAGTATCTATAGATGACCTGGAAATGGAGACCTAAAAAGTTTCTGAAAAGTT ATGTCGTTGGTTTTGCTAGTACGGTCACGACCATAGTAATCTTTGGTACGTGCCCCACAGGCTCCAGAAA ATAAAAGTCAAGCTGCTTTTGCTTGACTGCGGTTTTACCCTGGCAATTCGAATGACTCTGCTTTCCTCTT CAGGCTCCCGGAGAGAGAGATGTGGGTACCGCCTTGTGCGGAGACAGAGAAGTGCCGACGAGCAGCTGCA CTGTGCCGGCAAGGCCAAGAGAAGTGGCGGCCCACGCGCCCCGAGTGCGGGAGCTGCTGCTGGACGCCCTG AGCCCCGAGCAGCTAGTGCTCACCCTCCTGGAGGCTGAGCCGCCCCATGTGCTGATCAGCCGCCCCAGTG $\tt CGCCCTTCACCGAGGCCTCCATGATGATGTCCCTGACCAAGTTGGCCGACAAGGAGTTGGTACACATGAT$ CAGCTGGGCCAAGAAGATTCCCGGTAGGGCTTTCTGGCTATCAGTTTTCCATGTACTTGTAGAAAGGCCG GCCGCTAATATTTAAGGGGCAAGAGTACAAAGTAGAGGTCCATGAGCTGTGCCTAGATATTTAACAGGTC AGGCCGTGTTCTGATTTAGAATTCTGAGACTCTTCTGAGTTCTGTACCCAACATGGTAGTGCAGAAAGAG TTGTGCGTGGCCCAGCCATTTCTATTCTTGACTGCCTTCTTTTCCCATGGCTAGATGCATCCCATACCAC $\tt CTTGCACAAACCCTATCCTGTGTGTCCACATCTGCTACAGACACTCACCTGTTGGCCACCTCTCATGCCT$ AGAGGTGGTCTGGGAGGATGGACCCAGGGAACCTACCTAGGCTCTGGAATTGGGCTTGGGGTCATTTGGG CAAGAATCCTAGAGTCCTGGAACCTGGAACGTGGTTAAAATGATAGACTCCACATTGACCCATTTCTTGG CTGTGGATTCCTCACCTTGAAAGGAGGGGTGGGGTAGAGTACAGTATGACTAGTTTGAAAGTGAAAGGTT TGTCAGATGCTAAATAGAATTTTGTAAATTATTGTTCCAGTAGAGAATCAATATTATGTACATAAATGAA TATGTATGGACAAACAGAGTAAATCAGTGGTTGAAGTTACACGAATCATCAATGGGCCCATAAACCTGGA ATGCCATCAAGTTAAAAATGAGCTTAGTTACTCATGAGTTGTCACTTGGAACCTGCGTTTTCCATCCTCC AAAGTGATCACTTCTCAAGCCCATTTGTAATATATCTGAAGTGCTGTATGATGCTAAAATTACCAG $\tt CTAATTATCATTTGACTTGGTGTTTCTGTGGAGGAGTGAATCTAGGATTCTAACCTAGAGTGGCAACACCC$ CCACGATCCCCTGTGACAGCTTCTCCATGCTGTTCTTTACAGTCCTTGAAGAAATGAAGTCTCTTATAA GTTCTGAGCCACTGGGGGCATTCCCATGGCCTGGAGGGCAGCGACTGCACTGGGCAAGCTGTAAAGATGA GTATCATTTGGGGACTTTTGTTGGCCTGGGCCCATTTCTTCTGAGCTTCCTGAGGATTTTTTGGTTTCTAG TTGTATTTTGTTTTGTCTAGCATCTTCACCTTTGCCAGAATTATTTTATTTTCTCTGCTTTTTCCCAGGG GAGGCAATACTGATGCACTTTCCTCTAGTTTTTGCTTTAAATGTATTCCAAACACGATTTTGCAGGACCA CACATGGAGAGCAGTGGTGAAATTAATTATTGCTGAAAGCTGTGCACCTTCTTTGTGCCATAAGAAATCT GAACTCTTAAACTGCATTATTCCTTATTCAAGCCTGGTGTTTTGAAAAGTTTTCAGGAAACGTAGACATA TAAAATATCATCTAGCCTTGATCTTGTTGAATATCTACAAGATTAAGAACCGTGATCTCTCTTGGGTAGG CTTATTGTCAATCACTATGGGTGAGACTGGGAAGGTATATACACATTAGGAACCTAAACTGAGCAAAGCA TGTGGATTTAGAAAGTATTTATCCATCTTTACATTCATAACACCATTACATTCTCCTTGAGGCAGATTTG CGTTATAATTGTTCAAAGACTTGAACCATGTGTGTTCTCTCTGCTGTAGTTTCCTCATCTGTAAAACAAG AATGATAAGAGATCCTGCCTATAAGACATTCTCAGAGATAGGCATTGTTACCCCCATTTTCCTATAAGAA AAACAAAGACTTAATGGGAGATTAAGTGAACAGCTAGAAAGAGGCTGAGCTGGGGTTCGAACCAGAGTCC ATTTCACTCCAAGGCGGTGTCTTTTGTTATCATATTTATATTACATGGCCCTCTCTTTTTATCATGGCTT AACAGTACTGTGACCAACATGGGTTATTAGGTTGTCAGGACCTGCTTCGTTATTATATTTTGCTCTTTATT TATTTATTTATTTATTTTTTTTGAGACAGGGTCTCGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCGTGA TCTCAGCTCACTACAGCCTCGACCTCCTGGGCTCAGGCGATCATCCCACTTCAGCCTCCAGAGTATCTGG GACTACAGGCACCTGCCACCATGACCAGATAATTTTCTGTAGAGATGGGGTTTCTCCATGTTGGCCAGGC TGGTCTCAAACTCCTGGGTGCAGGCAATCCACCCACCTTGACCTCCCAAAGTGCTGGGATTACAGGTGTG GCACTGCTCTCTGCAAGCCTCCAACCTCCACCTACCCCATCCCCCACCTACCCCATCCCCCACC TCAGTAGTGCAGAGGAATTATCAGGACACAGCTAACAAAGATCAGTTCTGAGCCGAGGTCGTAGTGCTTG CTTCAAAGTTTTCTTCCTTTAATGAGCAGTTAATCACATCTATAAAATATCAACTCCCTAATGGTTTGTG TGTCTCACCGCCTCTTGCTTTCCCCAGGCTTTGTGGAGCTCAGCCTGTTCGACCAAGTGCGGCTCTTGGA GAGCTGTTGGATGGAGGTGTTAATGATGGGGGCTGATGTGGCGCTCAATTGACCACCCCGGCAAGCTCATC TTTGCTCCAGATCTTGTTCTGGACAGGTGAGAAAAAATACATTGTGTTTCTTCTCTGACTTGTTTGAGTA AGGTGCTTAGTGAGTGGGAACAAAGTCCTGGGTGCTGCAATTAAAATCTCACACTTGCAGGGCAGAGGAT TCCTGTGACTCATTTTTAATCTGTGGTGCAGCAGCATTTACAGGCCAGCGCTTTAATAGGGGACTGTATC ${\tt CCGTAGGTATGTGGCCACTATGTGTATAAGTCGACAGATTTTTCTCCATTAAAAATTCCATTTTCAGG}$ TTATAATCTTAAGTTGTCCTGCTGTTTTTTGTACCTATAGTGACCAATTATATCTGGAGCTTTCTGGACA AGAGGTGCAATCTTGGCTCACTGCAACCTCCGCCTACCGGATTCAAGTGATCCTGCTGCCTCAGCCTCTC AAGTAGTTGGGATCACAGGTGTCCACCACCATGCCAGGCTAATTTTTCTATTTTTAGTAGAAAGTGGTT TCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCTCAGGCGATCTGCCCACCTCAGCTTCCCAAAGC ATTTTTGGCAATAGCGGTGGAAGGAAGGGTTACTAAAACTATATGAAACTTAACAGAAAATGGGACATGA TGCTGTATCTTGGTTGTTTTGATTTTCTTTTAAAGATGACACAGAAAAGGAAACAATTTTTAATTGACT TAGGTGAACTGTTTATGGAGGGAAAGCTGGACTGTATAAAAATACTCAAGCTTTTTAGCAGGAAAGTAGA ACACCCTCTTGGTGTAAATTCGAGCAGTTCGAAATCTTCTTGGAAATTGATTTCCACATCTCTTTTATGG AAAAAGTGCTAGGTTGAATGTTCAGCCACATCTGACTCTGCATAGCGTGGGAGGATGCCTAGTGTCTACC CCAACTCTTGCATTATAATCCTGTTACCACTTTAGATCATCAGAAGACCCTGTGTTACACAGATGAAGAG TGATGCCCCAAGGTATCAGTCCCCATTCTGCCTTTTGTCATGGTTGACAATGTTATTAAAAGAGCACTGT TCTGCATAATGGTGTTTTGATAGAGAACAGATCCTCTGAGAAGAGCTGGAGGACTGATGTGACTTGAACA GGAGCAAGCCCAGGTGGTAAACCATGGAGGGAGGCTCTGGAAGACCAGAGAAGTTCAGGGCACAAGACCC TTCAGTAACAAACAAATAGTTAACCTATTGGCTTGTATGTGCTTGGCAGCACCTTATGCATTTAACTTA TGTCAACACATTTAATCTTCACAATCTTCCTGCCCCCTTTGAGGGAGTAGGATCCATTATTATCTCTATC ATTCAGATATTGGAAATGGGAGATTGAGAAACCTGCTTACAGGTAGGATAATAGGTGGTGGAGCTGGACT TGGGGGGTTGCCAAATGGCAAACTAACTCTCTACTTTATTCTACCTGTTGTTATGGGTGACAATGTTGAC AAAGAGCACATTCTGCAGAACAGAGATGTTTTGGTAGAGAACAGCCCTGTTTTACTTGTAACACACTGCA $\tt CCAAGCCATTGCTCTCATTCATTGTATTCTGCTTGGTGTTTTAACTGGGGCCAAATATACATATGT$ ATAAATATACACATATAATTTTCCTTGAAGTTAGTCCTAGGAACACATTCCATCCCTTGACAAATAATTT $\tt GTGACTATTTCATTCCTGGTTTTTAGTACAATTAACTCTCCACTCTCCCATTTCTCTGTATGCGTTCTTT$ AATTCCTGTAATTGTGTGTATACATTACTATAAGTGGACACAAATCCTGGAAAAATATTAGGCCTACCTT TTAGTTAATAGAAGAAAAGTTATTTTTCTTACAAATTATTTCTAATAGACTTACACTGCCTTTATAACTT GGCTGGAATACGATGGCATGATCTCAGCTCACTGCAATCTCCGCCTCCCAAGCTCAAGTGATTCTTGTGC TTTTTTTAGTGGAGACGGGGTTTTACCATGTTGGCCAAGCTGGTCTCGAGGTCCTGACTTCAAGTGATCC CCCAGCCTCAGCCTCCCAAATTGTTGGGATTACAGACGTGAGTCACCACGCCCAGCCTACAGTCTCTAGT ATTTTTAACACATTAACTTTCTGAAGTCTGGAACTTGAAGTCTAAGATAGTTCAGTTACTTAGTCCTCTC TTATACAAATGAATATACTTTTATGTAATAGGTATATTTGTAGAGGAGTTGCTCATTCAAAAAGTCAGGA GTCATGCTCCATAAAGACTTCTATTACGACTCTTTTTTGCAAAGTGAAGGGAATCTTCACACCATTTGAA AATAACTGTCTTCTGCTGGATTGTCCTAGCAGAGCTTCTTCAAGTGGTAATATGGCTGAATAAACAGTGA ATACAACTAACAGTTGCCCATTTGTGGATACTGAAACTATAATTTCTGTTTCCCTTTATTCTTGTTGAGG TGTCCACAACAAGAAAACTTGTGTCTACTGAGGATGAGAGGAAAATCTCATTACTTCAGCTTATTTCTAA GCATTTAGTTTTTCTTTTACTAACCACTAAATTCATCATAAATTCACGTGAAGATCTAAAGAACCTGACT GTCTAATTGCTCAAAAAAAAGTCACATATGCAAAGACATTTTTGTGTCCTTAGTATCAACAGGCAACTGA CTAATGTTAAATTATTAGTCAGAGGAAGTTTGTATCTGGCTTGGATCCCATTGTGGACATTTGCAGATAG GTCCGTGAAATTGTATATGTATAAATGTCTTGAGTTTACATTCACATTAGTTATTTGTATGCTAAATTCC TTCAAGATAACCACCGAATTTTCAATTCCCAATTCTAAGCCTTAAACACTCCCTGCCATTGCCATACACA CCCCTAAGGGAGGCCCACTCATTCAACATTTTGTTGTTGTATTAAACAATATTCTTCTTTAGGCCAGGCA CGGTGGCTCACGCCTGTAATCCCAGCACTTGGGGAGACTGAGATGGGTGGATCACCTGAGGTCAGGAGTT

CGAGACAAGCCTGAGCAACATGATGAAACCCCTTCTTTACTAAAAATACAAAAATTAGCTGGGTGTGGTG GCAGGCGCCTGTAATCCCAGCTACTTGGGAAGCTGAGGCAGGAGAATTGCTTGAACCCAGGAAGTGGAGG TTGCAGTGAGCCAAGATCACGTCATTGCACTCCAGCTGGGGCGACAGACCAAGACTCCATCTTAAAAAAA ATAAAAAATAAAAAGCAATATTCTTATTTATAAAGAGTGATTATTGGCCGGGCTCGGTTGCTCACACCT GTAGTCCCAGCACTTTGGGAGGCTGAGGTGAGTGGATCACTTGAGGTCAGGAGTTCAAGACCAGCCTGGC CAACATGGTGAAACCCCTTCTCTACTAAAAATGCAAAAATTAGCCAGGCATAGTGGTGTGTGCCTGTAAT CCCAGCTACATGGGAGGCTGAGGCAGGAGAATCACTTGAACCTAGGAGGAGGAGGTTGCAGAGAGCAGAG GTAATAAATTTGATATGGTTTGGCTCTGTGTCCCCAGCAAATCTCATCTGAAATTGTAATCTCCACGTGT CAAGGGAGGGATCTGGTGGGAGTGATTGGATCATGGGGATGGTTTCCCCCCATGCTGTTCTCATGAGAGTG AGTGAGTTCTCACAGGAGCTTATGCTTTAAAAGTGTTTTGGCAGCTCCCGGCTGTCTTGCTCAGTCACTCG $\tt CTCTCCTGCCTCCATGTAAGATGTGCCTTGGTTTCCCTTTGCTCTCTGCCATGATTGTAAGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCCTGAGGTTTCTGAGGTTTCTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTGAGGTTTTCCTGAGGTTTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCCTGAGGTTTTCTGAGGTTTTCCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCCTGAGGTTTTCTCTGAGGTTTTCCTGAGGTTTTCTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTCTGAGGTTTTGAGGTTTTCTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTTGAGGTTTGAG$ GCCTCCCCAGCCATGCAGAACTGTGAGTCAGTTAAACCTTTTTTCTTCATAGATTACCCAGTCTCAGATA TTTATGGACAGATAGTGTGCAAAAATAAATTTCCTGAGTAGGTCAGTTTGGTTGATACATTGTTTCAATA ${\tt GGCCCAGGCTGGAGTGCAGTGCCATCACGGCTCACTGCAACCTTGGGCTCCTGGCCTCAAGTGATCTCAGGCCTCAGGCTGCAGTGATCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAGGCCTCAAGTGATCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCTCAGGCCAGGCCTCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCAGGCCCAGGCCCAGGCCCAGGCC$ TTTGCTTCAGCCCCCTGAGGAACTGGGACTATAGGTGTATGCTACCATGCCTGGTTTATTATTATTTTTGT AGAGACAAGGTCTTGCTACATCGCCCAGGCTGGTCTAGAACTCTTGGCCTCAAGTGATCCTCCCACTTTG TGTCATTAATTTAGAGTCTTTACTAACTTTGTTCTGTGTAACTCATCTGAAAGACCTTTACTGGGCTGTC GCTTAAAAAGAAAGCAATCAGACCTAGTTCTTTAGACTTTGTTTAGAAATTAACTTTCTCCATGAGTTAT GTATGGTCTGATTACTGTGAGGGACAGCCTTTATCAGGGTTTAAAATACCTCAGTATGCCAACCCTCCTC CCATTTTTGGAACATAAATTTGCAGTGAAAATGGCATATATTTTAATGAGGAAATGATACCAATTTCAAT CTTGGGGAGGGGTGTGTGTGTGTGTGTGTGTGTGTATTGTGCATGTGTGTATAATCCCACAT TTTTGCCCCATAGAGATATTTTCAAACTAGCTTTCCTTAGTATCAAATGTCCCCAAGTCCAACAGTTACA ATTTCCAATAATTAATTGTCCGCAGGCAAGGTGATTCAGGTGTTTTTTGTGTTATCTCTGTGCAGGGCTT GTGTTGTCCTTACTGGATGCCTGCATCAGGTTGCCTGGGAGAGCCTAGAGCTGGGGAGGTGGAAAGATGA GGCTTCCTGTAGATTTGGCACTCTTTGCCCAGTGCTCTGGATTCTCTAAGACGGCCTTTTCCTATGAGTG ACTTCCAGGGGGCACTGGTGTTTTGTCACTTAACCTGTGTACTTATAGAAAATTGCAGGTGTTTACAGAA TTTATGATTTAGTAAATTTAGTAACTTAGTAATGCTCATATACCAAAGTGAGCAATTTGCATGCTTGTAG CTCTGTGTGAGCGAGTCTGGGTGGGAGAGTGTGAGTGCTTCGGAATGCAGGATCCCGGTGAGTGCCATGT ACGGCAGGTAATGGGAAAGACTTCTGCAGGACTGGTGTATCCAGTGGTGTCAGAGGCTCTTCCCTGAAAT AGGCCCCTTCAGGGGCTGCTAGAGACTAAAAATGGAACTCGCATAAACCCACTGCCCTTTCTGTGTGCTG CAGGCTTTTGGGAGCAAAGGGTGGTTTTGTGACAAAATCATCTAACTGCTTGTCAAGGACTTCCAATAAC ${\tt TCCTTGGCAAGTCAAAAATTTTTCCCCACCTCCATGTATACCTTCTTTTCCTGATTCTAATCCATCTTCT}$ CTAATTGCGATTTCTTCTCATAGTCAGCTTTTTCAAATTACAGGTAAATGTCTTAGTTGCTACACAAGT TTCTAAGTGACCACCAGGAAGTGAGAGTTAAGCCCTAGATATGGAGTTTTATTCTTGGGATATTTGCTTC TGTGACACACGGTCTTCCTCATTAATACTTCCCGATGGGAACATGAAGTGTCTCATTTTGAAATACGTGT TATTTACTTCAGGGATTTATAGGAAATGGCCTATCTTCTTTATATGAAGACAATTCTAGTAATTTCATAT TGCTGGGTGTGGTCTCATTAACACCCTGTTGTAGTTAAAATGATATTATCAGATGAACATGTTACAAGAT GAAACTTGAGATTAAAAATAAAACATTCCTTATTGTTTTTTTGATGGTTTCCTGAAGCTATGTTCCTTAA ATTTCCAAACGAACTTTTGTAGGGATGAGGGGAAATGCGTAGAAGGAATTCTGGAAATCTTTGACATGCT CCTGGCAACTACTTCAAGGTTTCGAGAGTTAAAACTCCAACACAAAGAATATCTCTGTGTCAAGGCCATG ATCCTGCTCAATTCCAGTAAGTAATCACACAGCTGGGCCATGTTTTATCGGGGAGAGATGCTGTTTCTAC AACTAGCGTGATATTAAGAAGAATGTTGAACTTCTATTTTATTTGAAAGGGTAAAATGGTTTCCTTTTGG ACTTCGTTTTTATTTTGATAGCGATTTAAACTGTAGGTAACTTTTGGTAACTTGGACATAAATTACTCAT ACTTATGTCTGGGGTCCTCCTTTTTTACAGATTCATTCGTTCAGTAAAGATACAATCCTACCCTCAAATG GCTCATAGTTTAGGCAGGGAGAGAGAGAAAACAAATCATTAAAAATAATGATTTCTGTGCTATGATAAAG TCTACACAAAATACTACGGGAAAATAGGAGGAGAGATGCTGGAGTTGTTGCAGAAGGGAATGATTGAACA AATCTTCAGGAAAGAGCAGAGGGAAGTAGGTATGACTTTAAAATGCAGTGCTGAAGATTAGAAACTGCTG GTCACTCTGGCTTCCATGTGGAGGACTAGAAAGGGCAGAGACTGAAGCCGGGGGCCCCATTAGAGGCAATG AGAGCCTGAACTGACATTATGGCGTGAGGTCAGGGAGCAAAGGACTTGACTTGAAGGAAAAGTGGGAGGT AGAGGAGGGAAATAAGGTGTCTAGGATATGCAGATGGTTTCGTTTTGTTGGTTTTATCTTATATAAATAT CTGATTATTGTTAATAAACATTCAAATGAGAAAAACATACAAGGAAGAAAATAAAATCATCAGGAATACC TTTTTTGAGACAGGATCTTGCTCTGCCCAGGCTGGAGGGCAGTGGCATGATCATAGCTCACTGTAAC CTAGTACTGAGCTCAAGTGATCCTCCCACCTTGGCCTCACAAGTAGCTTGGAATACAGGTGCATACCACC AGACCTGGTTAATTAAAACAATTTTTTTTTTGTAGAGACAGAATCTTGCTGTGTTGCCAGAGGTGGCCTTG AACTCCTGGCCTCAAGCAGTCCTCCCACCTCAGCCTCCCAAAGTTCTGGAATTTACAAGCGTGAGCCACT GTGCACAGTCTGTATCTTGTTTTTCACTTTTCTTTTTGAGACAGGGTGTCACTCTGTTGCCCAGGCTGG AATGCAGTGGCACGATCATGGTTTACTGCAGTTCCGACCTCCTGGGCTCAAGTGATTCTCCCACCTCAGC AACCATTCTGGGTCAACTAGGAGAGATCTAACACAATCTTTGATATGAGGGCATTATACTAAATTGTTCA ACCATTTCTCTGTTATTAAATATCCAGTTCCTCTTCCTTTTTAACCATTATAAACATTACTGCAATAAAT AGAGATGTGTTATTTTGTATGAATTTCTAAGTTTCTGGATGGTTGTCAAGACTGGTCATTTCACGATCTA CCTGGTGTCTAAGCCAGCCGCTCTAGCAGATATTGATGGCTTTGCTTAGCCATTTACTCTTGTCGAGCCT TTAGGTTATTGACTTTTTTTTCTTCCTCAAACACTGTATATCCAGGTTTTAATGTTCACCTGAAGACTTAC AGATATCTCTATTTAGACAACATATTGGGCCTTATTTATCCAATCTTAGAGTTCGATACTTGAAACAACA GGGATATATCAGATCATATTATACTACGGTCTTTAAATCAGCCAAAGTAGCAGTTCCTGAAGCCAAGATT CAATGCAGAATTCACTGTGGTCACATGTTTCCAGCTGCCTCTTGATCTGGGGCCAGCTGACCTTCATACG AGAAAAATAAAAGTGTAAAATACAAGTCCTAGTTTATAATATTATTAGTTATCACATTCAACTGATTTAA AATTACTCTGTCGATTGCTAAAAATGTTCCTAAATGCTTACACTCAATTTCTACCCATCTCTTTGTAAAT GGGCAACAGACCATACATTAGCTCTGGAGAGAGACACAGGATACTGTCCAAGAGTTGCTTGGATCTAGGGT GGAGGGTGGGGTTAGCCCCTGAAGAACTGGGTGAGGGAGAATGAAGAAGGAATCTGAAGGCCATGTGAAG GTACAGAGACCTGGAAGACAACCTTTGAGCATTTCCTAGTTAAGTCTCAATCTGGCCTTACCTGCCTAAC AGGTCATTTCCCCTGCACCCAACACCCCTTCCCTGTTTATTGTTACCATTCACCTTTTACAGAATAACA TTTTTTTTTTTTTTTTTTTTTTTGACAGAGTCTTCCTGTGTTGGCCAGGCTAGAGTGGAGTGCAGTGGT GGAATCTTGGCTCACTGAAACCTCCGCCTCCCAGGTTCAAGTGATTCTCAAGCGATGCCTCAGCATCCCA AGTAGCTGGGATTACAGGTGCATGCCATGCCTGGCTAATTTTTGTATTTTAGTAGAGATGATATAT TAGTCTGTTCTCACACTATTATGAAGAAATACCTGAGACTGGGTAATTTATAAAGGAAAGAGATTTAATT GACTCACAGTTCAGTATGGCTGGGGAGGCCTCAGGAGACTTACAATAATGGCGGAAAGTGAAGAGGAAGC AAGATACCTTCTTCACAAGGTGCCAGGAAGGAAGTCCCAAGCAAAGGCAGAAGACCCCTTATATAAC CATCACATCTTGGGAGAGCTCACTGTCATGAGAACAGCATGGGGGAAACTGCCCCCATGATTCAAT TACCTCCACCTGGTCTCTCTTGACACATGGGGGATTATGGAGATTACAATTCAAGATGAGATTTGGGTG GGGACACAAAGCCTAACCATGTCAGACAGGGTTTCACCATGTTGTCCAGGCTGGTCTTGAACTCCTGGCT TCGAGTGATCTGCCCACCTTGGCCTCCCAAAGTGCCGTGATTACAGGTGTGAGCCACCACATCCGGCCCA AACATTACCTCACATAGGTGCTGCCATTTCTGTCAAAGGGAGGATCTGCTTGAAGAGTACCTTCCCATCT TGGCAATGGAAGATCATCAAATGCCAGATGATGGGGGCTTCTCTCACTTTCAGAAATAATTTAGATCTCTT ${\tt TTCTGTGCAGGAAAGTGCTTCTCGGAAAGCACTGTTTGCTTGTTACAACACTTTACAGTATAAAGCC}$ TTCTGTTTGGCAAGGCTCCTTATAGGCATTTTAGCCTCCCAGACATCATATTGTGTTGTTGTCAAAGCTA GACGCAGCATCTGTGCAAATGGGAAAGATGAAGGCTACAGCATTCCCCTGCAGCATGACAGAACTGCCAC ATTGAGATAATTACAGAAGGCGAGGGAGACATGTGATGTAATTACCACTTGTGGCAGTAAACGAGTAAAA GTATTTTTAGTAGAGATGGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCGTGATCCG CTTGCCTCGGCCTCCCAAAGTGCTGGGCCCTCGCCTGGCCAGAGATCTTCTTTTAAGGAAGTTCCTTTCT TGGTAGTCATAACAATTGTCAAAATTAAATTGATCCTGTTCAGCATTGCTATGGCGAAAATGGGACAATTT ${ t TCACTGCTAGGTTAAGTGAGTCTTTTCTATGCTAGGTTTTAAGGATTTGTAAGTACAGGCTTTTTTCTTC$ TGGATTATTTGTGGTATTTAAATTTAAAAAAAAAATAGGGATGGAATCTGCCTCCCCGCCTTAAAATTTAA AACCCTGACAGAATATATAAAACAGATATTGGACATTGGACAACAGTGATCCCCAGGAGGAGGGACACAA ACGAGGAGAGCCCTTTGATTGTCCAGTTTACTGCCTGGAGCCAGTTTCCAGGTTGCAAAGCAGGGATGGG ATTTATTATGAAAACTGACTTGAACAATTATGAAGGCTGAGAAGTCACATGATATGCGTCTGCATGCTAG TGAACCAGGGAAGCCAGTAGCATGGCTCAGTGTAAATGGAAAGACCTGAGAACTAGGGAGCTGGTGGTGT AACCCTCAGTTTGAGATTGAAGGCCTGAGAAACTGGGAGGCCACTGGTGTGAGTCCCAGGGTCTGGAGGC CTCAGGCTGGAGTGCAGTGGTGCCATCTTGGCTCACTGCAACCTCCACCTTCTGGGTTCAAGCGATTCTC CTGCCTCAGCTTCCAGAGTAGCTGAGATTACAGGCATCTGCCACCACGCCTGGCTAATTTTTTGTATTTT TTTGGCCTCCGAAAGTGCAGGGATTACAGGTGTGAGCCACTGTGCCTGGCCTTAGTCCACTGACTCTAAT GCCAGTCTCTTCCTGGAACACTCTCACAGACATACCCAGAAATAATGCTTTATCTGCTATCTGGGTATCC CTTTATCCAGTCAAGTTGACACCTAAGACTAACCATCACAAAAGGGTAACCCAAATAGACACCAGTGGTCT $\verb|CCCTTGGTAGCAAGGCAGCTAGGACTTGGAGGGGAGAGTACTGAGTGGGAAAGAGCTGCACAAAGAATTT|$ TGGAGATCTATGGAGAGTCCTCTTCAAGTCTTCAGCTGAGTGCTAATCTGCCCATGCTTATGAGGATACC AAGGACAGGGAAAGAACCATCAGAAAGGAGCGGGCGAAACAATCCCTAGAGTTCACACAGGGCCAGGAAC AGTTCACATTCTCACCAGCCAGTGGGAAAAACCTTGCAGTTCACTGGGTATTGGGCACTTCTCAGCCTTC CTATAGTATTCAGAAGGGTATTGCCTCAGTAGTGGGCCTAGACTAAAAGCCATTATGATCCTACCAAACA AAAAAGCAAGCCTGGAGGATCAAACAATTGCTAAGTGATTTAACTGCATCCCAGCACAAAGCTCAAGAGT AGAGACACCCCATTTCATTACATGTTGCTTTATTGTGCATCACAGATACTGCATGTTTTTACAAATCG AAGGTTTGTGGCAATGCTGCATTGAACAAGTCTGTTAGTACCATTTTTTCCAACAGCATGTGCTCACTTT ATGTCTGTGTCAAATTTTGATAACACTTTGCAATATTTCTAACTTTTTCATTATATCTATTACAGTGATC TGTAATCAGTGATTTTTGATGTTACTATTGTAATTGTTTTTGGGGTGCCACAAACTATGCCCATATAAGCT GGCAAACTTAACCTATAAATTTGTGTGTTCTGACTGCTCCACCAACTGGTGGCCCCACCACCATCTGGAA $\tt TTCTGGGAGAATTCTACCATGCATTTGAGGAAGGAATAATACCAAGTGATATGGTTTGGCTCTGTGTCCC$ AATCATGGGAGCAGGTCTTTACTGTGCTGTTCTCATGATAGTGAATAAATCTCACGAGATTTGATGGTTA TATAAAAATGGGAGTTTCCCTGCACAAGCCCTCTTCTCTTGTCTGCCGCCACATGAGATGTGCCTTTCAC TTGCCCAGTCTTGGGTATGTCTATCAGCAGTGTGAAAATGGACTAATACACCAAGTTTACACATACTCTT TCTAAATTTTTTTTTTTTTGGTAACTAGAATCCAAAACTGTATTAAAAGAATAGCACATCATGAACAAGC GTTTTTTTTTTTTGAGACAGTCTCACTCTCCGCCCAGGCTGGAGTGCATTGGTGCTATCTCAGGGCTCAC CGCAACCTCTGCCTGCGTGCGTTCAATCAATTCTGTCTCAACCTCCTGAGTAGCTGGGATTATAGGTGCCT GCCACCATGCCTAGCTAATTTTTGTGTTTTTAGTAGAGATGAGGTTTCACCATGTTGGCCAGGATGGTCT CAAACTGCTGACCTCAGGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTAGGATTACAGGTGTGAGCCAC TGCACCTAGCCATGATTATCTTAATAGATGCACACAGCATTTGACAAAATCCAACATCCACTCCTGCTAA AAACACTGTACAAACAAGGAATAGAAGGAAACTTCCTCAATCCATTAAAGGGCACCTATGAAAATCCTAC ATTTAATATTATACTTAATCACAATCAGGAACAAGGCAAGTATGTCCACTGTCCTTAATTCTATTCAACA TTTTACTGTAAGTTCTACCCAGTGCATTAAGGCAAGAAAAGAGGTAAAAGGCATCAATATTGGAAAGGTA GAAGTGAAAGTCTTTATTTAAAAACATGAGAATCTATGTAGAAAGTCCTAAGGAGTCTAAAAAATGTGAA TTTAGCAAGTTTGTAAGGTGTAAGGGCAATATATATAAATCAATTGTATTTCTGTGTGGCACCAGTGAGC AATTGGAAATTGAAATGAAAACCACTACCATTTACAATAGCATCAAACATTGTGAAACCTTGGGAATAA ACTTGCAAAAGACATGAAACCTGCACACTAAACACTGCAAAATATAGCTGAAGGAAATTAAAAGAAATCCT GAATAAATGGAGAGAGATGTTAATGGATCATAAGATTCAGTATTGTTTTCAATCTATAGATTCAAACTGA TAAAAATCCCAGGAGGCTTTTTGGTAGAAATTGATAAGCTGATTCTTAAAATCATGTGAAAATGCAATGG ACATAGAATAGTCAAAACAACTTTGAAAAAGAACAAACTGGGAGGACTTACACTACCTGATTTAGAAGAT AATGTGGTATTGATGTCAACAGAAACAAATAGATCAATGGAACAGAGAGTCCAGAAATAATCTATACAAC TACAGATGTTCCTCAATTTATGATGGGGTGATTTCCCAAAAAACCCATCTTAAGTTGAAAATATTGCTAG TTTTTTTTTTTTTGAGACGGAGTCTCGCTCTGTGGCCCAGGCGGAGTGCAGTGGCGCAATCTCGGCTCA ATGGTCTCGATCTCCTGATCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAAGCGTGA GCCACCGCCCCGGCCAGCCTAGCCTATCTTAAATGTGTTCAGAATACTTACATTACCCTGCAGTTGGGC AAAATCATCTAATATAAAGCCTATTTTATAATACAGTAATGAACATTTCATGTAATTTATGGAATACTGA AAGTTACTGTACTGAAAAACGAAAAAACACAATGGTTGTATGTGTACTGGAAGTACAGTTTCTACTGAAT AAAGTACATCAAATCGTACACGCAAAATATGTGCAGGTTATTGCATGTCAGGTATACCTGGATGAATCTG TAAACAATGTAATGAAAGCAAAACAAAAAGATTAAGAGGCAAAGTTTGTAGGCTAAATGGAAAAGAAAT ACCACCAAGCGGGGAACCAAATCACAGGGTGGAGGCCCTGGAGGATAAGGGTCAGGAGAGAAAATGGG GGTAGGTCTCTTAAGTCAAAAGGCTGCGAACTTCTCTATTCCATGTTAGGATAGCAGAGTTTCCAAGCGC TGCATTTGGTTGCTGGTAGATGGCCTTGCCAGGCTAGATAAGCATTGGGCTGTCTGACGATGGTCTCCTG CATAGTTTGGTCTCCTGTTTTCCTGTGTATGTGACATGCTTAAGTTAGGATTATGTCACTCAATCACATC TGCAGTGGTACAGCACGCTAGCTGGCCAGGTCGCGGTTTGTCAGTAGTCATGTTTTAAAAGCTGCCCATT TCTGGGTTATGCATATCTACTAATAATGGCTATAATATGGAATGGAAATTAACTGTGTCATCCAGCTAAA TTTCAGCTCAGTTTCTGGTATGTATATTAATGACTTCTAAATACTAAGGATGTCAAAATGATTTAGATAT AATGCTTTTGGTCTAGAATGGGATATATACTCAAATAGTTAATCAAAGGTCTGATCCATGGTGGGCTTAA ATCCTCTTCCACTATGCATATATAGGTTGTGTGGTACTTGGAATTCCTGTATCATACTTAGCCTTTGATA TGGCTCTTGAGAGTAAGAGACAACAGAAAAATGTTGCATTTAACAACCTGTTACAATGCTTGTTAGAGTG TTTTTATAAACTCTAAGGTGTTATGCAAGTGTCATAGTTAATAAAATAGCCTACCCAACACCCAACAGAC AGACTGGCCATCTTGCCACCCAAATCCTCCCTTGGATAGAATTAGAGGGGGTATGGAATTTAGGAATTAG AGTGTAATTAATTACATTGATTATCCATAGTCTTTAAAATATTTTAAATTAGAAACAAGTCTATTTAAAC CTATTTTACATTAAGAAAATTATTAAGAGACACTGGCTTAAACCCTAGTTCCCTCTGAGTTTATAGGGAG TCCTTTTCTGTTGACCAAGAACACTGGGGCAAAGCACAGTTGAACAGCAGCCTGCAGCCTCACACCATGG CACCTTTTGAGTCCCATCTGCCCTCATGTGCTGGGGGCAGGAGGTGGTGACAGAGGGCGTGGGTCATGGC CAGAGGTTCCTTTCCTCAAAGCAAACAAGCAAACGCCACATACGGCTCCCCAAAGCCAGGACTTCTTCCC AGCTTATGTTTTCATCCTTTGAACAAATCAGACGTGGCAAATCTTGAAGGAGAGGTGGCTGTCCCCCACC ACTGTGCTGCTCAGAATGTCACCAGGTGGGCTGGTGAGAGGAGCACACAGCTGTTCCCAGCTGATAAAGG GGTTTTTTTTTTTTTTTTTTTTAAACTATACTTCTTCCGTTTCATCAAAAGTAATTTAATTTTGTTTTA CAGTGAATCCTAACTGATGTTTTTACTTTTGGGGGATGGAGAGGGTGCTATATTTTTGTGGTTTTCTGTG CCTGACTGGGCAGAGCTTTGGATCTTGTCCCTTGCCCCATGCTGCCCAGGGCCTGCCACTTAGCAAGTAC TGGAGAGCCAGGCAGCATGGGTATTCTTCAGCACAGTTCTTTTCTGGGAGGGTATTTCTTTTCTATG CTACCCCACCATATGTAAAATGGATTTCGCATATGCCTTTCCACACACTGCAGTGCCTCACCTCCCCAAAC CGCTGTGGCTGATGCACTCTGGGCCCCAGGTGGAGCTGTGCTGCCCCTACAGCCTGCAGAAGGCCCAGGG ${\tt TCTGGCCTTGGCAATGACTGTGGTTCGTGAAGTGGGTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGCCTTGGCAATGACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGCTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGCTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGGTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGGTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGGTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGGCTAACACAATGACACATACGTGTTCTCTGAGGGGAAGTGGGGAAGTGGGCTAACACAATGACACATACGTGTTCTCTGAGGGGGAAGTGGGGAAGTGGGGAAGTGGGGAAGTGACACATACGTGTTCTCTGAGGGGGAAGTGGGGAAGTGGGGAAGTGACACATACGTGTTCTCTGAGGGGAAGTGACACATACGTGTTCTCTGAGGGGGAAGTGACACAATGACACATACGTGTTCTCTGAGGGGAAGTGAGAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAAATGACAAATGACAAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGACAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGA$ AACTTCGTTGCACACAGCCCAGGGAATTTATGTTATTGTAACTTTGGTTCTGAGGCGTTCTTTTATTATT ATTATTACTATTATTTTAGTAACAGCTTTATTGTGATATAATTCATTTACCATATAATTTATCCATATT AAGTATACAGTTCAATGTTTTTAGTTTATTCACGGTATGTGGTGCAACCATCACCACCATCAATTTTAGA GCCCTAGGCAACCACTAATTTGCTTTTCTGACTCTATGGATTTGCCTATTCTAGACATTTTATTATAAAT GTATCAGTACCTCATTCCTTTTCGTAGCTGAATACTATTCCACTGTATGGATAGACCACATTTTGTTGAG CCATTCGTCAGTTAGTGGACATTCCACTTTTAGGCTGAGTTATGCTGCTATGAACATTTGTTTATAATCT GAGGATTTGTTTTATATTTTCAATCTTTGTCACTTTGAACTGAGACATGTACAGGCACACAATTTTGGC TCCTTTTGGAATTCCCAGACATAGTATTGCTTGATGGCAGCGGAAGTCCATGGAGCACATGTCATGCAGC TGAACACACTACGGGGTAGTTAAAAGGAAGTACTTGTTTATGCAGATGGGGTTAATTTTAGGGAAAGTAA CTTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCGGATTGCGAGGTCAGGAGTTTGAGACCAGCCTGG CCAGCATGGTGAAACACTGTCTCTACTGAAAATACAAAAAATTTGCTGGGCATGGTGGCGCATGCCTGTA ATCCCAGCTACTAAGGAGGCTGAGGCAGGAGAATTGCTTGAAACCGGGAGGCGGAGGTTGCAGTGAGCTG AGGTCTGTGCCCTCAAAGCACTCATGTCCAGTCTTGCTGAGGGCAGAAGGGTGGCTGTGGGGTTGTGTG GGGACAAGGCAGACATCCAGCATGTGGGGCAACATGGTGTCTCTGCTGAGGATGAACAGGGCACTGTCAG AGTATCAGGGGACACCTCAGACCAGACTTAGGGTGGGATGGTAGGGAGGTTGGGGGAAGCTTCCAGAAGG AATTTCTGACCAGGTTGGAATCTACAGGAGGAATGGGTATAAATGAGCAAAAGAATCAGGGTAGAGAAAG AGGAAGGAGAGAGTTTCCAAGCAGCAAGTTGAGCATGTTCGGAGCACCACACATTCAGGGAGTTGAGAGG CTGCACCAGGTGGTTTGGACTCTATCCTATGAGCTGGGAAGTCATTAAACGGAGCCCCATGAGCAGATCT GCTTTTTGGCCTCTCAGAAGGGGACACACGGGGCCCAAGGGTGGGGTCTTGTTTCCCCTGCGGTGGGAGGG CAAGTCATCTCTGGGGCGACAGTGGGAGGTTTGAGGCTGTGGGGGGGATTCTGGAAGAACCAATGTGGAGA ACAAAGTGAGCACAGGGATTGGAGAAGCAGCTTCAGGGCTATTGAAAAGATGAATATTTTAAATTCGTAT CATCAGACATTATGGAGGTCCCTAGGGATGTGGCAAAGCACTACACTTACGTAATTGTGCTTCAGAATGT CCCTTGCCTTACCTGAGTTAAACTTAGTTGAATTGAGCTGCCTTAATTGAACTGAAAGTGCCAATAAAAA TAGAGAACAAAACTGCCAAAACAAATTCTGTGGTTGCTGGAGCACCAGCCATCATCAGTCTCATGACAG AAGCTAATTATTAAAGGGAATCAAGGAGTCAGGCAGGGGTCGGGGGGGAGGAGATTTATCTGAGCTGTTAC TTTGCTGCCATTGGGATGCCACAGTATCTCAATCCTAGAGTTGGAGGGGAGTTAAACACAGGGCAGGGCA GGATGGGGGAGGCAGCCTACCCAGGACGTGGCTGTGGGGACCTAAGCAGATGTGTTCCTGCATGCGTTGC GTGGTCTTCCTGCCCCAGCCAGGTGCCACTCAAGCGAGATGCAGAGGTGGTAGCAGGGGCCCTGCCATGG $\tt CTGGCTGCGGCACGTGGTACACACAAGGAGGTGGCAGAGGAGGCTTCATCACATTGGCCATTCCTTTGTT$ TATTAAACTCCCTTTAGATGGGGAGCCCTCCGTGGGGCTAAAAGTAGAATTAATCTCACCTTCTGACCAT CTCTTCTAGCTCTGTGACGGGGCTGGCTCTCAGGGAAGATCCCCTGGGGGAGGTAAGACCATGCTTATAA GCTCCTGCCACACATGCAGCTGTCAAAGCAACCCAGATCACCTCGGAGCAGGCGCACGGAACAGCTGAGC ACACGACTTCTGCTCCTTTGCTCAGAGCAATGACTTCTGGCTTTTATTCTTTGTCCAGGTATGTACCCTC TGGTCACAGCGACCCAGGATGCTGACAGCAGCCGGAAGCTGGCTCACTTGCTGAACGCCGTGACCGATGC TTTGGTTTGGGTGATTGCCAAGAGCGGCATCTCCTCCCAGCAGCAATCCATGCGCCTGGCTAACCTCCTG ATGCTCCTGTCCCACGTCAGGCATGCGAGGTACGCGCCCTAAGGAGCTGCTCTGCTTGGGCTTGGGATGG AAAGGGAATGGGGAATTTGTCAGTTCACACACCTGTAAGCAAAGATGGGCACAGAGTGGGCATGGAAGGA ATGTCATGTGGTATCTTACAGGCTCTGCATGGCAGCCAGTGGTGGCTCATGGGTTTTTCAATTGCTGGGG TTTATAGCCTGTTTATGGAGTCCTAAAAGGGGCAGTTCCTCCCCTAACACGAACTGCCACCCCTGTTTAC ACCACCCAGGGCTGAGGCCCTGAGGCCACTTTTTGTGGAGAGGCTAAGACCCGCTCCCCTAGATGGCCCC TCGAGCTGGTGATGCGAAGAAGTGCACAAATGCTTCCCTAAGAGTTGTTCTTTCGGTGGCATCAGGAAAT TTCTGATCAGGAAACGTAATTGTGTGTGCTGATGAAGAGGGTGTGCAGTGGTGGCTACTGTTGGTACAAT GATGCTCAGTGCTTGGTGTCACCCACGATGAGGGTAGCCTTGCCCTGGAGCTGGAGGAGGGGAGGGGAGG GTGGAAGGTAATTAACTGGTCACTGAGGAGGCAAGTCTAGAGGCTGTGGAGAAGGACAATATACACCTCG AGAATCTTAAGTGAGATGAAGACCTCTGCCTTTCCCCTTTAATGATTGCTCAGCACATAGCCATTTGCAG AGTCCCAGCTGAGATGGAACAAGCAGCTGCTCTCATACTGTCAACAAGTGTCCTTTACTTGGTCTACTTA GTGCCATGGTTTTACATTTTTGTGCTTTTGGTGACTTCACTGTTTAAAATGCCCCCCTGGTGTGGTGCTG AAGACCTGTCTAGTGTTCCTCGGTGTGAAAAAGCTGTGATGTGCCTTATGGAGAAAGTATGTGTTAAGCT TTGCTCGGGTGTGAGTTATAGTGCTGCTGGCCATGAGTTCAATGTTAATGAGTCAATGGTATTTATCACA ${\tt TAAGGCATCTTTAGAAAGAAACACACATAAAACAAGGTTTTGTATTGATCAGCTGATGAAGATGTGGCCA}$ AACATAATTACCGCAAACAATGAGGATTGATTGTCCTATGTGTCAGGCCATTGTAGGTGTGTGGGGAC

ACAGAGGCTGACAAGACATCGTCCTTGCCCTTGAGCCTAAATTATCAGGGGGAGCTGGATGCACGAGCCA TGGATAAATGGGCTGGGGGAAGAGTGGGTTTAGGGGTGGGGTAGACTGGCTCTGAGCAAAGAGACCCGGG GAAGGCTTCGGGGTTCCTGTGGCTGCCTCGGAGGAGGGAATCTCAGCACCTTTTTGTCCCCATAGTAACA AGGGCATGGAACATCTGCTCAACATGAAGTGCAAAAATGTGGTCCCAGTGTATGACCTGCTGCTGGAGAT GCTGAATGCCCACGTGCTTCGCGGGTGCAAGTCCTCCATCACGGGGTCCGAGTGCAGCCCGGCAGAGGAC AGTAAAAGCAAAGAGGGCTCCCAGAACCCACAGTCTCAGTGACGCCTGGCCCTGAGGTGAACTGGCCCAC AGAGGTCACAGGCTGAAGCGTGAACTCCAGTGTGTCAGGAGCCTGGGCTTCATCTTTCTGCTGTGTGGTC CCTCATTTGGTGATGGCAGGCTTGGTCATGTACCATCCTTCCCTCCACCTTCCCAACTCTCAGGAGTCGG TGTGAGGAAGCCATAGTTTCCCTTGTTAGCAGAGGGCACATTTGAATGCAGCGTTTCCACACTCAATGGC GTTTTGGAATGAATGGTGGAAATCTGACTTGGAAGGGCTGCGAATCAGAAAGGGGAGGAAGTGACACG CTTACAGAAGTGGGCTAACCCTTCTTGTGTGGCACACACTACCCTTCCCTCTGAGAGTTGACCTTTGCTG TTTTCCGGACCACTCCATTGTAAGATTGAAAACCCCTGTGGCAATTGCGTACTTACCTCCCAGGCCTGTG GGGACTGATCATATCATATGATGCTTATTCTGTCAAAGGCCAGAGGGACTGTGGTTAAGCTGGGATGTGA GTCATGTTCTCTCCCTGACCTTGCTGCCAGCTGCACAGATTTGTCCCTCTCGATTTGTATTCACAGAG CCTGCCAATAATTTGGGGTATGTGTATGAGCGTGTGATCATTTTCATGCAGGACTGTGGGAGATACAA ATCTCGCTGCTTCTGGAGCTGCTCTTCCTTAAACCTGTTGTCCCATGGGGCCAGCGTGGGTGCTGGAGAA ATGTGGATGCAGTTTCCATCTTGTACAACCTCATAAGTAGCAGCCACAATTGCCCCCATCAGTCACCACAA CCCCAGTGTGTCAGCTCTGGGGCCACACTGTATAGCCTTGATGAGTACGCCCCTTGAACAAGACCCAGTT AGAGCTCTTTTAAAAATATTTTCTTATTGGAAAATTTATATGGTGGGCAGGGTGAAAAAGAAACAGTAAA AATATTAGTTCTTATTCCAAGTGGAACATAAATAGGACATGAAGAAGGGCACCTCTGAAATGACAACTTT AACTCACCTTTTAAAAGATGTGAAATTTCCAGTTTTGGATACACGGTGAATATGTAAAATGAGTAACAGC ATACTATGGAAGCCAGCAATTAAATAATCATGTTTCATTATTGCAGTAACGTTTTAAACAATTACCTTGT GATATGATATTAAATATTTTTTTTTTTTTGAAAATATGTTCACTTTGGGTAGCACATCCTGTATTTACTAA TTTTGATATTGGTGCAATTTTACTATAAGTTGAGCTTAGCTGTTTCAGAAATGCTTGGACAAGTACCTAG AGAACACACTGATGTCTGTGTTCTGAGGCAGTCTGAAGTTATTCTTAGAGACTCAGTTACAGCTTTAGTA AGATTTAGTACAGGCAGGATAAGCTTGGTTTCATAGGAACCAGGGAACCAGTGTTAGTGTCAGCTTCTTT CCTCCTGGTCAGCCTAGAATCCCCCACTCCCAATAGAGGGGTTTGGAAGCTGGAGAGTAGGAAGTAAGAG GCAAAGAAGGCAGCCTTCAGCAACTCATTATCTGCCAGTGAAATTCTATTAAATGTATTTTTAAAAGAGA TTACCAGGTAACAAAACATAAAAAACCAAAACAAGGCCAGATGTGGTGGCTCACGCCTGTAATCCCAGC ACTTTGGGAGGCCGAGGTGGGCGAACCACTTGAGCCCATGAGTTTGACTCCAGGCTGGGCAACATGGAAA CCCTGTCCTACAAAAGATACAAAAATTAGCCAGGCGTGGTGGTGCAGGCCTGTAGTTCCAGCTACCTGGG AGGCTGAGGTGGGAGGATCACCTGAGCCTGGGGAGATCAAGGCTGCAGTCCATTGCACTCCAGCCTGGGT ATAATTTTTTTTTTTTGAGAGTAGATCTTAAGACAGAGATCACTTCTACTCCTGGGAGTGAACTGGCAAT GGCAATCCCTTTAGAGCCTCGAGTGGGCAGTATCAGGAGCGCCGCACAGTGAGTTTCCAGCTGAGCTATT CTCACCGAATCTCGCTCTGTTCTCACAGCACCCCTCTGTCAGGCCTGTCTCATAGTGACTGCCCACCAGG ACTGACTACAAAAGACTTGACCCTAAAATAGTCTTGAAGGGATTTTTCTCAAAAAATTAAGGCGGGAACA CAAGACAAAGCTGTCAGCCTAGTCACAAATCTGAAGACTCAACTGCATTAAAAATAGTGCAAAATCGGCA GGAGCTGTACAGTGCGAGTCTTGGTCTGGAATACTCCCCCTGCTAACTCAGCTGGAAGGGCAACTATCTT ATGTATATAAGTGGAATTGAAGCAATTCTAGAATTTTCTAGCATGTGAAAGCAGGGTTTAGTTCTTATTT ACGTCTGCTAAGGGACTTTTCAAATTCAAAGTGAACCTTCTGTTTATAGGCCTATTTTGAAACAAAGTAT CTAGAGTGCAGTGGCCCATCATGGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGCGATCCTCCCACCA CAGTGCCCCATCCCACCCCATTCCCGCCCTCGCCGAGTAGCTGGGGTGCACACCACCACTCCTGGCTAAT TCTTTTAATATTTGTAGAGATGGGGTTTTACTATGCTCCCCAGGCTGGTCCTGAACTCCTGGGCTCCAGC GATCTGCCTGCCAAGGCCTCCCAAAGTGCTGAGATTACAGGCATGAGCCACTGTGCCCAGCCCCGCCACA TTTTTTTTTAAGTTGCTGAAAATCTTTTAAAAAGATAAAAACACATTATTTAGTATCTAAAGATAATATC TGTGCCAGACACAGTTCTCAGTGCCTCAGACATTCACATTTAATCCTTATTATAATAACTGCTATTTCCT TATTTTCTGGTTGTGGAACTAGACACGGTCTAAGCAAACTTGCTGAAGGTCACGTGGGGAGTAGGTGATT GAGCTGAACACAGGCAGTCCAAGTCCAGTGCTGACAGTGACCATGCACTTCAAACAGTTTAAAAAATTTAA AGAAAAATATTTTAAAACTGCAGAATCTATCAGGTGCAACCTGACATGCACGGCTGCTGTGATTTAAATG GGGCCCCCTTGTGATACCCCCTTACCTCCCACCACAATGTCCAGAACACCCCTACAGACACACAGTAAGTTT GTAAACCTCTCACATCAAAGTTCAACTCCACCTTTCATATCTGTGTAAATTAAAGCCCACGGGGGCAAAT TCACCTATTCAAGGTCATAAAACTACTCATGGCAAAGCTTGGACTGGCACGCAAGTCTTCTGCTTGCCTA GCGGGCCAGTATTGCTCCTGCCCCAGGACTTGCTTCTGTGAGAATCTGCTTTGTGAGCTGAGTCGCAGCA GAATGGAGGGGCGGTGAAGTTAGGGTTGTCTTCTGCTGTACCTTTAGATCCCATCTCCTCAGCTTAGATG GGTCTGCATGAGCCTTTACACAACAGCAGCAATGACAGATGGAAAAATAAGATGCATAATCTGTTATTCC CAAACACGTGGAATATGTTCCTTGGAAGTGTACTCATGTAAAATTCACATCTTTTAGGCACTGCTTC CCTGTGGAGTGTGATATACTACAGTGTGAAAACACGTGCCACTTATTCTTTATAGCTCTCAAACTTGCTG GAATTTTGGCTCCAGTGGCAGCTCTTAAGATGTGCATTGTCTGTGATGTATGATCGTAGTGCCATTTTTG TTGTAGGGCCAGCCACTGGTAAACTGGTGGTGGGTTTCCTCTATGGGAAGCACATAAGGAGTGGTGATAC CAGCCGCGAACAGTTCCTGTTAACTGTACAATGGATGTTTTTGCATTTGTTTCCTCTGTTGGGTGTCTAA TTTGCCATTTTCTCAGACGAATGCTTTGTATCATTACACTAATTTGTTGACTTCATTTGCAGGCTTTACA TTTGGGCCTTGTAGAAATGAATGTTTGCTGCTCTGTGAAAGCAGATTTTGAGACCTGCTTTCCCTC CAGGGAGTGTTTTCCTTACTGTGTCCCTTTAATGTCTATGGCACTGTCGTAGAGAGTTTAACATGATATA AATAAAGTGTTTCATTATTTTGGCTTTAAAAATGTATTTGTTGGGGGTTGAGTGTAAGAACTTACAGTAA TTAGGCTAAGTGTCTACATTCTGAATTCTTATTGTGGGGTTAGAGAGTCCTTTGAGAATTTG ATGAAAACCAGGGCTAGTCTTCCTGGGAAAGGGCACCTGAACACAAATGCTTGAGTACAATTTCAGAAGA GTTAAGAAGCTCTGCTTTAATGTATCTTCTTAAAAAGAACAATTTCATCTTTAGTCAGCTAATCTCACAC TTGTGATTGATTTATGACCACAGGTCCTGTGTATACAAGTAAAATGCAGCTCACAAAAGTCCTGGTATCC AGTGCATCGATTATTTGGATAGATTTTCTGTAATCATTCTGAGTTTTGATTAGAATTATATCCTTTACAGA TGTGGGCAATGAAAGATTTGCAGACGATATAAAACCCAGACTACCTCATAAAAGAGTTTTGGGAATACAC TGAGCTTTGAGTGAAAGAGCTGCAGTGGCCTCCCTGGAGATGGGGAGCAAACCAGCTTAAAGGCCCTTA ${\tt TCCTGAGGAAGAGACAAAAATTGACATGCACAATATTAAGCTTTGAAATGCAGACCACACTTCCTTTCAC}$ TGCAACTTTGACTTGTCCCGCATCTCTACTTAAGGGCAGAAAAGGCCTCTCAAACACTCACCTCATTTGG AATGAAGATGGAGACTCTTTTGCCTGAAGCAACGATGGAGCAGTGACCCTCTAATCAACTCGGTGGCCTA ATCCAACAATTTGATAACTGTAAACGCTAAAGTGAAGACGGATTCTCTTCAGATGGTCTCCTTAACTGCC ${\tt CAGGGCTTGCAGATGTCTCACCCATGAGGGGCACCAATGTAGAAAGCTGAGGCTTCATCTACTGATGAGC}$ CTGTGCCTGCCAACAGATGCAGGTTAGGAACTGTGTTCAGTATCTTCCAATAAGAAAGGGGAAATGCCGA TGCCTATCCTCTTTGTTTAGGTAGAAGTAAAATGCTACTGGACTTAAATGGGCAACAAGGGGCTTTGCC TGTTCATTTGCCATGGAGAGGGCTGGGAATCCAGGTGCGGTGGCTCACACCTGTAATCCCAACACTTTGG GAGGCCGAGGTGGGCAGATCAGTTGAGGTCAGGAGTTTGAAACCAGCCTGGCCAACATGGCGAAACCCCG TGAGGCATGAGAATGGCTTGAACCTGGAAGGCAAAGGTTGCAGTGAGCCGAGATTGGGCCACCGCACTCC CCTTTGCGTCCACCTCTCATGCCATGCTGCCTTTGCCATTCCCTACAATAGCTGAGGGTCACACGCTGAA TAATTTAATTTACACATACACGAGGGTCCAGAGCTAAGTTAATTCTGTAAATAAGACTTAGAATAAAAGG GTTACAGAATTCAGTACAACAGAAGTCTGGCTAATTTTGTTTTTTAATGAGAAACATCTGAGTTGTACAT CCAAAGCAAAGCATCACTTTGGATGTGAAAAAGTCTTAGAAAATTAACTTACAAAAACATCCCTATCAAG CGAAGTTTACATTATTCATACAGATTGGGCATTGTTAAAAAATATGCACAAATAACCACATCCATGCAAT ACAATTTCTTTAAAAATTTAAAGCAATATAAAAGAGCAGAGCTAGGTACTGAACAGAACATTTTGGTGTA ACCAGAATTCACAAAGTGCTTGGCTCTTCAGGAAACTGACATTTCCAGAGATCCCTAAACTAATCAACTA GTTCTGCCAAAATACCCGGGGCACCTGCCACACAGGTTCCCTGCTCCTGGGGAAGAACACAATCTGAAAG CTGCCCTGGGCTCCAGGGAGCCCGTGCTGGGTAAGCCCAGAAGAAGTCTGCACAGGTCCCGGGACCTTGC GCACTGTGGCCAGCTATGCCCTCTATGTGGGGGGGTGGCCCATTGGTGTACCTCAGCATGGGGTAAAAGGA GCCGTGTGCCGGGGACCCTGCCAACAGAGGGGGTTGAGAGCTGATTGGGAGGCTCCACAGGCACAAC CCACTCTATTACCTAAGCCCCTGCTTATGTAAGTAAGAAATCCAAGACCTGAGATTTAAATAGGGCCAAC AGTTGGGGTTCAGTTTCAGAGGAGAAAACCAGCCCTTTCCAGACAAAAGAAAACCAGATTTTTGCAAGGA ${\tt CCTTGATAGTGGCATTGGCAAGACTGAGTCAGTGGGAGTGTGGAGCAGGGGAACGCACTGCTGTCACGGT}$ AAAGCCCCGTTACCTGCTCTCTGTCTCCTCCTCGCCTTCTGTAGTTCTCACTGCTCTGAACTGCTGGGTA TAAATTATATACCACCTTTATGTTGTGTTACAGCCAAACTTTGGAGACTAGAGTAATACAATTGAGATTA AACGTCACCTGAAGTAGGAAATAATTAGGTTAATCTACTCAGTTTCAGGGTCAAGTGTGTTGAAGTTTTT AATGGCAAAATCAGGGAACCCCTTTAGCGACACTATAAGAGCTCTCATTCACAACCTACTGTGATCCCAA AGAAGAGTGACTAGAGGCAGACTGTAAGCCTCTCTATGGGTCAGCAGAGACCTGTGCTGTCCTGAAATGG CTAATGGGCTCTTGGAATCCCAAGCTTCCCTCATCTTAGTGACTTTAAAAAATAACCAGTGAGGTTCTCA CAGAAGGAAGGGCTTCTTACCTTTGCTCGGGGAGCTGGCACGGATGTTGCAGGAGGCTGGTCCCCCGAG TCTACCTCGTCGAAGCTGGGCAGGGGTGAGGCTGGGTTCTGAAATTCAGACCCCAAAGGTTGAGCACAGA TGTTTTGTTTTAGACAGTCTCACTGTGTCACCCAGGCTGGAGTGCAGTGGCACAATCACAGGTCACTGCA GCCTCAACCTCCCAAACTCAATCCTTCTACCTCAGCCTCCTGAGTAGCTGGAACTATAGGCATGCACCAC GGTCTCAAACTCCTGGACTTAAGTGATCCACCTGCCTTGGCCTCCCCAAGTGCTGGGATTATAGGCATTA GCCACTGTGCCCAGCCTTAAATCTTTCCTGAAGGGGCTCTTCTATTGCTCTCACTCCCAACAACAACAACAGA GCTGGGGAGACTGAGTTTAGCAGCAGCAGTTTGAGTAGATGGTGAGCTCATCACAGGTCGGTGATGAGAT CATGTGGCCATCAAGAGGTCTAGTTTTGGCTGCTTAGGAGAAAACAGACCTGCCCTAAGTCTGGTGAGG CCACAGTCTGGGTATTCCCTTTGTTTTGAGTTGGATCCCATTTTAAAGTAGGCCAGCTATGGTGGCTCAT GCCTGTAATGCCAGAACTTTGCATTGCTTGAGGTCAGGAGTTCAAGACCAGCCTGGGCAGCATGGCAAGA

ACCCTTCTCTACAAAAATTACAAAAATTAGCCACTTCCTTTAAAAAAAGTTTAAAAATTGTCATCCCGCC

ACTCCCTTTTAAAAATGACAAAACAGATTCAAAGAGCTCATGCAGCTCTTTAAGTCCACACAGCTAGAAA AAGGGCACGACATGAGGCCCCACTCGGACCACCTGGCCCTTGCTTCTGGCCTCTGTCTTAGAGCATTGCT A CAACACTGCTGTCCTGTCTGCATGTAATACGGCAATCTTTACAGTTAAAAGCTACAAGTAGACTCACCTGGGTTCCCTGCAAGGCCATTAAATCTTGGGACACTTGCTCCCGTAACTGTTTGAGTTTCTTCTCAATAAC ATGCACCTTTTCTTCAGCTTCAATACAGTCTTCTCCATGTCCCTTAATGAGAAGGCTGTTTGAAATCTCC TGTAACATGTCCACTTGAGGTTGACGTTCTACCAGCTCCTTTTCCAGTTGCTGAAAACAGATAAAGTGTG TGAAACAGTGACCTGTCCAAAGGGAAGCGAGTGTGGACACAGGAGGTTTTTCTCAGTACCAGAAAAATTC ${\tt CAGAATGAATGATGGGTAGTACTCAACTCGAGAATCCTCTATTTCTCATATCTGCCTGTGTCCTCCAGCC}$ CAGCACTATTTAGATAGCAAGTGTATTATGCCCTGCCCCTATTTTTAATTTCTTTTCACTCTGAAGACAA CACGGAAGGAAGTAAAGGGAAACTCTAAAGTCAATCAACCGAGAAACAGCAGCGTAACCATAGAGGTTCA GCTATTCATTTATTTTTTTTTTTTGAGGTGGAGTCTCACTCTGTCGCCCAGGGTGGAGTACAGTGGCACGA TCTGGGCTCACTGCAACCTCCGCCTCCTGGGTTCAAGCGATTCTCGTGCCTCAGCCTCCCAGGTAGCTGG GATTACAGGCGCCTGCCACCATGCCCAGCTAATTTTTCTTGTATTTTATTTTATTTTGTATTTTAGTA GAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAACTCCTGACCTCAGGCGATCCGCCCGTCTCAG GCTCCCAAAGTGCTGGGAGCCACCGTGCCCGGCCTACATGTGGCTATTTAAATTAACTAAAATTAAAAA AGGTCATCTCTATCACTTCAGAAAGTTCTACTGGACGCCACTGCTTTGCTTTGCAAACATTTTAGGAAGC TGTATTTTTAAACAATGGCTAGCACTCTGATTAAAATTTAAAATATTTAAACCACATACAGATTTATGGA TGAAAATGTCACCTTGAGCACCAGTGAGAATACAGAAATCTCATCTTGGTGTGTTAGTGACAAATACACC AGGACACGACTCTCCTCCAAGAAGAAGATTTTTCCATAGTGGATACAGAAAACCCATTCAGCTCATCAC AGGTGTGAAGCAAATGAGCACCATATTTCTCCCCAATGAGCAGGATTCACGAGAGAAAAAATACTTCCACT CAAATGGCCTTAAGTTCCTCAGGATATCGAGAGCACCTATGTCCTCAGTTCTGTGGACTGTGGCTCTCCA TTCCTGCAAGTCATTTGGCTTCAGAACTACAAAGGGCAGCTCGGTAAACACCAACTGGAGGAACACTAGG GCTGAACTCGTGCATTTACAGGCAAACACCACTGGCACAGTTCCTGAAATACTAGGCGAGGCTACCTGAG TTCTTGGCACTCGCTAACCACAGCAGCAGATTTTGACTCAACTGGTGGAAGTCCTTAAAAAAACAACACAT ${\tt CAGAGCGGGCCGTGTCTTAGAGCCCTGGAAGAGGGTGTGCCAGGAACATGGCTTACTGCTTCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCA$ TCACAGTCATTTGCTTTTCTGGCCTTACCCACTGAATACGAGGACCAGCTTTAAACTAAATGCCAGGGCC CCAAAATGAGGAAGAGGAAAGAAGAAGACACTCAGCACAGTGCCAGGAGGCCGCGAATAAAAGTGCCAC TATGAAGGTAGGGCTTTGGGATGCCCAGCTGATTTTATATATGAAGGCCACACGCATTCCTCAGCCAATC TGCTGGGTTCTCTGCTGGGTTCCAGTGGCAGAGGGAAACAACCCAACAGGACAGGCTGGGGTGGGCTCAC GTTCCCTGAGACACAGCCAGAGCTAGGCAGTGGTGCAGAGCTCACACCCGCTGTGCATTTACTGTGTCAG GTACTGGGCTAGGATTATACATACTGCCTCATTTACTCCTAAAAAGAACCTTTTTAAGGTTCTTTAAA AAGAAAATGGGAATGATTCCCATTTTCAGATGAGAACACTGAGGTCTAGGAGGTTCAATGCTTTGCTCAA AGTCACATGGCTATTAAGCAGTAACTGCTCCTCTGCTTCAAGGCCAGGTCTCTTAATCACTCTGGCAAAA GGACAAAAAGAGGAGTTGTGGGGTGGCATCTCTAACCTACAGGTCGCCTGCAGGAACCCTGACTCCAGGA GTGGCTCTGGGCCTGGGCAACAGAGACGAGACCTGGGACAGGGAGTAGGTCTCTGAGATGGCCGGTGAGC CTCTGTGGAAACAAATGGTAAAGCACATGTTTCCTGACACCAGCCACATTTGGCTGCACGGAAGCAGCCT GATGATGATAAAAATATCTGCTGCTCCTACCACGTGGGCCTGGGTACCGGCTCTGGGAGGCGGGCTGCTG AGTCAGCGTACCTGGCACTGCATGAGCGACTGTCGTAAGCCCCCTCTCCAGCTGTCCACTGCGCCCTGTG $\tt CTGCTTCCCAGAGCAGGCTCAGCTGGCGGAGTCTACTTTGGAGCTCTGTGGATTCGGGGCTCTCGGTTTG$ CTGGCTGGAAAGCATCAGGTGAGGGAGCTGCCTTAAGGTCTGTGAACTTGGCCAACAGGGCCCCAAAGTA GAGGCCTGCTGGAGGGAGGAGACCCTGCTGACCTCTACAGGCCCCGCTCTGCAACTGGCTTAATGTTTCT GGACCGACTAAAGGTCTTCCAGATAAAGTATATGTGGTTATTCTGCATTTGCTCCTAGAAATGCCAGAAA TGTTATTCCTTAGGAGGAATGGTAACCCCTAATATATTAACACAGATAGTAAAATAAAAGTACAAATATG AAAGGTACCTGGATCCTCCAAAACCCCTGCCCTGGGTCTCAGGCTACTGCTCATGGCACCCTTAAAGCGC AGGGCTCAAACTGTCCCTTTGCAGCTCCCTGGGCTAGTTCCAGTGGGGTCAGGACTTATGTAAGTGACAC ATCCTAATTGCATAAAAGGGTAATGAGGTCAGGCCACGGGATTCATCAGTAGGTGAGCCGGTCCTTTCCC AAGCCCTTTCAAGGAAGATTCCACCACTAGTCTTTCGTGTAACTGTGCAGCATACAGTTTGGAAGAGTGG TTTTACACTGCCTGACAGTGTCCACTAGCACCTCCAGAAAAGTCTAGAAATGCCTCGGATGTCAGATTTT TCCATCTCTGGAGATCTGAGCCACACCTCCCCAGTACTCTGGGATCAGGATCATTTGCAGATACTCTTCC CATACACCATCTGCAAGCTGCGCCTATGCCACGAATACATGGGATCTGCTCGTCCAGCATAGCAATGCGT TCACATGCACATTCTGAATCCCTCTTCCCCACCACACCTCTAACTCACCTGCAGTCTCTCACTCTCAGT TCTATTTCCTGGATATCAGAGGGAGGCTTTGCCATCTTTAACATTTCCAGCTCTGCTTCAGTTTTTTCA GCCAAGTAGTGATGGCGCTGATATCAGAGTTCAGCTGTTGCAAATTTTGTTTTATTTTGAGCTTATTGTG AAGCTCCTGTGCTTGAATCATCTCCCATCTGTCGAAGGCACCTGGAATTAAAAAATCGCCAATTAAAAAA ATGTGGAATAGCACATGATCTGAGGCGTACACTCCCACAGAGGCTGGAATGAAGTGGAAGGTCTATGTGC TACAGTTTCAAGCTCAACAGTTCAGTTCCTGCTGAATTTTTTCAGTTTTCTCCTTTGGTCCACAAATGAC CAGGTCGATGCTGTCAGCTTTAGATTTAGTTGAGTAATTACTTTTATAATTACTGGGCTGGTCGAATGAA GAGACACTTGAGATAACACTGATCATCATCCTCAAGTCTGATCTTTACACACAAATATAGAAAGTGAAAA CCTGCACTTCCTCAGGAGGCTTATTTTACCAACATTTAAAGAATAGTTTTCAAATTACACTGAACAGCCT AGGAATTTGTTCGTGAATGCCAATCGCTGATTTAAAAATAACATTGGTTGTTGTAGGGTAAGTCCCCCAG

TTCTGGCGAATCGTATAGTTGGTTAATATCTAATGAATGTTCTCTTGAGCAAGGACTTAAATACCATACT CTGCCTCTCTGGACGACTGCCAGTTACAGGCAGTACCTGACTGCTCTGTGATACCGGCCAGTCCCCC GTCTTCCTGCTGTGGGTTGCCATTCAGGACTCGCGGGCCTTCTTTGCCACCATCCGTGCCTGGAGGTAAT AGTAGCTTTCCCTAGAATGAGCCAGTTTTTAAGTTACCATCTGTAGATATGAAGGATATCTGAAGAACAA CTGGATTCATTTCATATTAACAGTGAAGAAATGAGATGGGCCCCTTTCCTTTGAAGGGTATCTTGCTAGG AATACAGTGGTGCTTTAGTGTCTAGGTAGCATTTATAAGCTGGCAAAGCTGATGGCAGAAATAAAGCCTC AGCTAAGGCCCAGGGAGAGGAAGCAGATGAGATGTCAGTGATGGGAAGAAAAGGGTCTGTTTCAATTGG CATGCTTCCAAACACCCCTCAAATGATCCACACGAAACAAATCAGAACAATTTGTTGAGCTTACCAGACG GTTACTGCGTTAGCACTTTGAATTTTCATAGTGTTTTACAGAATTTTAGTTATCCCTGTCACTCTGTAGA GGTGGTTGGCATCATTATCACAGAATCAGAAATGCACAGAGGATGAATCTGCCTCCCAGGGGCATTCGTT ACCAAGTGTTTATCTTCACCGCACATACTGACTCTTCTGTTATCACACAGCCGATTGGGCTGTTATCTC GGCCTATTTGTGCAGAATGAAAATAATAAAAAAAAACCTTCAGATTTGTGGTGATACATCTGGCTTCAG ACACAACAAAAGGGTTGAGATTTTGAAACCGGCCAGGTGAGGAACACAGGCGTCATCACAGGAAGGGATA GCCAAGCCACATGAGCCAAGGATGTAAAGCAGAGGTCAGGGACTGCGGTCTTTCCCCTGTCTTATTATTC TTTTTTAAAAAATGACACCTGCTTGAAGCAAGCAAGAGTGTTTCTGAATTGGACACAAACAGCCCATTATCAGCTGACTTGGATTTGAGCATGCAAAGGCAGAATCTCCTCCAATGATGTAACAATATTCTCTCCTTAAT TTCTCTCGCTGCTGCCCTAGGCTGCCCTCCCAGGAGCTGCCTAGCCAGAGCATGCCAAGAACTCAAGGCA GCTGAGGGAAATGTAACTAAGAAGAACAGCCATTGCTATAAACAACCAATACAGGAATAATAATC ACGACCAATACAGGAATAATAATCACGACCATTACTTCTGAGGACCTTCTTTTACCTTTATACACAATAA TCTTAACAACTACTAGGTGAAATAGCTTTAGCCTCAGGTGAGAAAGGCTTACAGAAGCAAGGCGAAGTGC CTCAGGTACCATGGCAATGGATTGGCAGGGCTAGGAATCAAATCCGTGTCCACTGCAGCACCACCATCAAT GATTTTTTGGAATAGGATGTATGGACAAAAGGTTAACATAACAAAGGCTTGAAGGTTGGATGCAGTGGAC CATGCCTGTAATCCCAGCGCTTTGGGAGGCTGAGGCAGGTGGATCACTTGAGGTCAGGAGTTCAAGACCA GCCTGGCCAACATGGTGAAACCCCCATCTCTACTAAAAATACAAAAATTAGCCAGGCATGGTGGTGCACA ${\tt CCTGTAATCGCAGCTACTTGGGAGGCTGAGGCAGGAAAATCACTTGAACCCAGGAGGCAGAGATTGCAGT}$ AAGTCAAGATCGTGCCAGTGCACTCCAGCCTGGGTGACAGAATGAGACTCCGTCTCCACAACAACAACAA CCTATCTCTAAGTCTAATCGGTTTTGCCGGGGTTCTAATGAAGTATGGACAGCTCAACAGAGACACTGTC CTTGCAAATGTAAGTATGACTCACAGACATAGGCTGTACTCCCAGTGAAGTTAAGACTTACATAGGGTGG TTTATAAGGGGTGCTGGACGCAGGGGGAACAGGTGGAACATTCCTGTCACCTTCCATTTGCTTGTAGTGA TGCTCGGGACAGGAAGGGCTGTCGGGAACATGCCACGAGTGGCCATCCGAAATGGATTTACCTGAAACGA AAGACAGCAAGCGACAGTCTATTCTCTCCTACTGAACGGGTCACGGGTGACATGGCATCAGGTTACAGTA AATGAGATGAGTCATGCAACTCAGCAACACTGTGCCTTCACTAGATGGGTACACAACGGAGCACGACCAA CATGATTTGCTGTGGGATGAGTGGCGTTTTGGAGCCAGGGTCTCGAGTGGTAGGGACACTGAGTGGCAAG GCCGGGTCTGGGGACCAAGATGGCAGAAGGCCTCTCAGGAGTGAGGGGAAGAGTGAACATCAAGATGGAC TTGGGAACCAAAAGGCTCCTCAGGGCTCTCCCCGACCCACCATGGCAGATAGGGATGGGCTAAGGATGA GGATTAGAGCTGCAAATCAAGGAAAGGAAGGTTTTTTCCCTCCTGTGGCAAATCATCAGCACCCTTTACC GCCCCAACCCCCACCCTTTCCACCAGGGGATCCCAGTAAAGCAAGGAAACAGTTCCAAACCAAGCCAC CATGAAGAAAGCTTGGCCCATGCCAAAGGACTTCAGTTAGATGGAGAAAAAAATCATCAAAAACAGGCACC $\tt TGGGGTTTTGTAAGGAGCACGCAGTTATGGGTGAGTACGGCAGTGTAAATACACCATGACAAGGACCA$ ${\tt AGGCGCATGGTGTCCACAGAAGGCAGAGGTAGACACGACATGGGAGCGAGGTTGAGGATGCAGTGTGCGC}$ $\tt CACAGGATGCTGCCATGTTGACACATGCATGGGCGGGGGCCTACCAGAAGACGCTTTCAAAGTTTTTGTG$ GTCATTTTAAGATATGCCTCAGGATTTTCAGGGATTTCTACATCTGAAAAAGAACAATGTCATTTGCCTC ACTGGAGGTGCCTGAAGATTAATGCCCAAGTATTAACACACAGTAGAAACATTGTCAGCTGGAAGGAGAA GACTGTCCAAAGCAGGACACTGGGTATCAAAGGGAGAAGCTCAGTCTGCAGACACTCTGAGAAACTCAAC TGAAAGGGAGGTAGGCACAGTGGCTCATGTCTGCAATCTCAGTACTTTGGGAGGCTGAGGCGGGAGGAC TTCTTGAGCCCAGGAGTTCAAGACCAGCTCTGGCAACATAGCAAGACCTTGTTTCTACAAAAAATTTAAA AACTAGCTGGGTGTGGCGTGTACCTATAGTCCCAGCTACTCAGGAGGCTGAGGTGGAAGGATTGCTT GAGCCCTGGAGGTTGAGGCTGCAATGAGCCGTGGTCGCACCACTGCACCTCAGCCTGGGTGACAGTGTGA GACCCTGTATCAAAAAAAAACCCTGATGAGTCTCCCAGACAGCCAGAGCCATCACTGAGTAACCTTAGT GTCTGAATGTGAATTTCATTTTTTTCCCCCTTTCATTCCACCTGTGATGAGAGTGAGCCAATTCTCAGG TAAGTTAAGAGATGGGCAGGATAGAGCACAGGAAACCACAGAAGTCAGGGTCGGCCACAAGATGGACTCT TGGTCATTGAGAGCTGGCCGTGTTGCTAAGGGGCTAAAAACATAGCCAAACGGGTCACTTTCCAGGGTGC GCCCCCACGTCGCCTGTGTGGTCCCACTCCAGGGGGATGGAGTCCACGCTGACAGGGGTCTCGCAGCCA GACCGCTCGTGCCCTGGGGCCACTAGATGACACAGGGACTGAGGAGATGACGGTTCCTCGCTCTCCCC GTTTACGCCAAGAATCAGTCTGGATTTCTCTGGGGTCTTCCATGTCTGTTTCATTCTCAGAGGCCTCCTT TTCATCTTCCAAGCCCTAAACCACAGTATCCAGTTGTTAGAATTAATCAACTCATAGGCTTCTGCAATTA GAAGAGCATGAGAAGTCTGCCTATCTAGCAGTTTCCAAAAATAACTGCCAATAGTATTTCTAAGGCAGCT TTAAAAAGATCAGGTTCCCAGGTCCTGTTTCTGGTTATTCCAGTTTAGACAATCTGGAGTGGGGCCTAAA ${\tt TAAACAACTTTATCTAGGAGATAAGGAAATGGTGGCCAAAGTTTCATTGATGGTTAATGGCAGGTTCCTC}$ CAAGAATCAGACTATTTTTGAAAAGGACATTTGAATGTTCTGGGTAAGACTCAAACTTCAACCAGATGCA ${\tt CCAGGTTCTTTCTTATCCTCCAACTTAATTGCTCAGTGTCTGTATTCTGCTTGTGTCATAACGTCT}$ TCGTATCGGTCAATGGTTGTCATTCAAGCTTCAGGCACACAAAGGCAGTACGCTTTGAACAGTGGCCTTA ${\tt ACTCCACCTGAACTTCCCAAAAGGGCCTTTCGTCTGGGGAAACATCAAAGTTGCTTTTGAAACTCTTGTG}$ TTTTCTCTTCCAAGGTGAGAACAAAGCATCAGAAAGGCACAAATACTAAAAGCTTCCAGCCTCTAAGAAA GAGGGAAGGCCAAATACATTCCTAAGTTACTAATGTAATAAAAGCCAGAAGAGTTCTTCAAGAATTCTAG GGGTAGTGACGCATGCCAGACAAGCCCAGCCCTGAGGAATACTTAAAAGCGACTCGTGGAGCATGCGCCT CAGAAGTGCCATGCTTTCCACTGGGGAATGGGAACTTGTAAGTTACTGTGGCTCTATATTAATAAAAGTG GAAATTAAAATGTTTTGATATAGCCCTTTCTTTTCAACCAAAAAATAAACCATAATTAACCATTATAAGA CAGGTCCCCTAATTCTTTAAAAATTTGGTCTCACGTAAACTCTGAGCAGCCCAGGTGCCATTTCTAGGCA GCAGTGCCCGTACCGGAGTGCAGGAGGTGAGCCGCCGGTGGAACCGGGAGACCCTTCCAAACACCTCCTG AGCTGCTCCCCAAACACAATGAGCTGATCAATCTTGTTGGTATTTAATGTAATTTCCTGTTGGAAGCCCT GTTGAGAGAGGAGAAAGAAAGGATTTCAAAGAAAGTTACCCTGAGCTTCCACTGCCTGTTTCTTCTAACA GGGCCATAGAAAAGCATCCAAATGTCATTATTGTTGTTTTCCTTCACCTACTACTCTAGCTTTAGTTTTT AACTAAGTGACAATGACATTTTAAGAATTTTAAGTGATTGTCTATATTCCCCCTCACGGGCACTGGCTTT TTGCCATGGCAAAACTTGTTGGGAACAGAACATTTCCCATAATAAGCCACGAATGGGCATTTGCTTTTGC TGACACAATAATATTCACTGGTGCTGTTATACTAGGGAAGGCAAATTTCCATTTCTCAACCTCTTCCAAA ATCTGGCCAAGGAGAATTACAGTGAGATTAGCCTGTCATACAGATATCAGAAACAATGGGAGAGCGGA CCTCTGTTCTTGGCCCCACTGGTGACACCCATACTCCTGGACCGTAAAGAACAGTATCCTTGCACGTGAT AATCTGGTAGTACACAGGTGGGATGTAGCCTGGCTGCTTTAAGAATTCTGAAATTTGCTCTCAGAGTATC GTGTGAAATTTGCACTTGGCCAGCTCTCCCACGCAAAGGTGTGTTCTTTTGAGAAGAGCTAGGGAAGCAG CTGCAGGTCCATCTCTGTGAGCCACACCAGAATGCTCTCCCTGGTGCCCTCAAATTCTTCCCTCTGGTTG CAAGGCCACCTTCGGCCACAAGAAAAGGGTACCCAGAATACTCAGGGAGAAATCTGCCTCTAGGGTACCC AGAAAGCCCCAGAAGCACTATGTTGTTCAGAGGCTGGGGTCTGGTTCTGGCTTTGTGAGACCAAACAAGC TCTCTGAGGTCCTTAAGCATTTGAAATTCTAAAATTCTCTAGTCCAAATCAGTGATTTTCCTCTGTCCTT TGAAGAGCCCCCTGAGGGGCCAGGCCAGGCCTTCTGCCTGTTTTACACATTGGCCTTCTGCAGCTTTTGC TTGACGGAAGGATTTAGTAGCTTCAAGATGGAAAAGCCTTGATATCAGGATTGAGGCCAGCCTGGTGCCC TCTCCAATTAAGGATGCCTCTCAGGTTACTGCTTCACAGATAGGCAGCTGATGTTCAGATCAGTATAGCT TGGTGGCTCACACCCACGATCCCAGCACTTTGGGAGGCCAAGGTGGAAGATTACTTGAGGCCAGGAGTTT GAGACCAGCCTGGGCAACATAGTGAGACCCCATTTCCACAAAAATTAAAATCAGCCAGGCACAGTGATGC ACGCCGGTAATCCTAGTTACTCAGGAGGCTGAGGCAGGAGGATCCCTTGAGCCTAGGAGTTTGAGGCTGC AGAGAGAAAAGAAAGGAAGAAAAAAAAAAGAAAGCCCAGATTTACATCTTTCTAGAATGGGTTCAACCAT GTTTATAACTGGATTCACACAGGTTTACACAGCACATCTTCTGAATGACAGAAATCTAAGGTGAATATTT ACCTTCAAAAACCAAACCTTTGTGTGCTCTGAAATTCAGAGAATAATCACAGTCCCCAACCCCCAGTGC AAACAGACAGATGGGCAAAGCGGGGCTCCTTCCAGGGGCCCACGTGTTGCCTTTTCCAGACCCAGCGAAG CGGCGCCCTGGACTCTGAGCTAACATGCACACCACCACGGGTTACAGAAGTTGTAAAAAAGAGCTGTGCGT TGGTAACGCAAATCTCATCAACAGGCCCTGCCTAAGAAGCCCCACATGCAAATCCCCCTTTTAAAAAAACG AACGTTGGCAGCTTTGGGCTTCTTTGTGTTGGAGGACTGTTAAAACAGCTCAGGCCTGAAGTGAAACCTT CTACCTGCTGCTTTGTGCCACAAGCCTGCCATTGCGTATCGTGCGTTATGTCTCCTGGAAAATCTACACC CGAGCCAGGTGCAGAGGAGCTCACCCTGAGTCTCCGCAGGACGGCTGTGACCCGCCTCTGAAGGTTGTCC CAGCGCTGGTTGCCCTCGTGGACCATCTGCTTCAGCCTGCTGGCCGTGTCTGTGCGGTTCTCCCGGGCCA CATCACATGGGAGGGGTCAGAGCCAAAGCATGCAGAGTGCCAGGACGCCCTCCTTCCCTTCTACATCCCA AGCGACCTGCTGCCAGGGGTTCATCCCCAAACTGCAATGGCAGCAGAGGGCCTAATTCACCAGTCCTGAT GCCAGCTACAGAACAGGCTTTCAAGTTCATTACATAGCAGCTGGAGTACATCAGCAATGTCTTGCAAAGC TGTCTCAGCAGCTGGGGCAGGCTGTGGTTTAGGCAGCCCTTGCCAGAGGTGAGGGGAAGCTGGCTACTT AGAGGAAGTCATTTCAGCAGCCCCCAGGCTCGCTGCAGGCTTGGTTATGATCAGGAGACCGGGATGGAGA AGGTGTTTACCTCAAACCTCTTCAGTTCCTCTTTGGCACTCGTGTACAACACCTCTGAGGAATTTGGGCA GGCTGCCGTCCTCAGCTGACTTGAGCCAGTCCTCAAAGCGAGAATAGTCGTCTAAAAACTTCTGCCAC TTCACAGAGGTTAAAAAACCAGGAGACAGGGCTGCCTCCACTACTGCCCAGCTAGGTCAACGGAAGCACA GCGGCCAGTCCACAGCCACACACAGGACAGCTGGGGAGAGACATTACTCCGGTTACATTTTTCTT GAATAAATCCTTTGATAAGCGTTGGGCCTTCTCTGCCAATACCTGGCGCATTTCTAAGTGAAATGAACAG AATAGTTACTGTGAATGAGGTCAGAAGGGTGTATTGAGTTCGGCTGACCACGCTGAAGGCATTTGGGGGA GCTTAGTTCTTACTTCATGCGCCGCTCCATGGACATGGCACAAATGTTCCTCCAGCGTCTGTCCAGGCTC $\tt CTGGTGGTCTGGATCGAGTCACACTCGGTCTCATTTGCACAGGCATCGGAGTCGTGCAGTAGGACGT$ CACAGATGTTAAACACGGACTCCACCCCTGCGCTGTGTTGTTCAATATCTCGCTGTAGATCCTGTGATTA CAACAGAGTAAGAAACCTCTTGAGATGTTGGTGGCAGCAGGAGGGTCAGCATCAAAGGACCTCCGTTCCT $\verb|cctcccttctcccagctcaggggatacttccctgggtggatttccaccatgaacttggcagtacacatgacttccaccatgaacttggcagtacacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgacatgaca$ GAATCCCTCTCATCTTTGTGCTACCCTTGTGCTGTCAGCACCTGACACAAAGTTTAAACACTGGAAACAT $\tt CTAGGACTTATGCGCTGAACCATGTGAGGGGTGCCACGGTGATGGGTGTCCTCTACGCACTGACAGGTGG$ CGCCATTACTGTTGAGAGCCCATCGCCCCACAGACTTCGGGTATGCATGGGATCTACTCCATACCACCCA ${\tt ACCCCAAAGGGCTCCAGTTTAGACTTGGTTTCAGGGAGGTCTTTAGAAACTGAGTCTCTTCAGCAGGAAC}$ $\tt CCTCCCCAACTGATAAAGTCCAGCCAAAGCTGTGGTGGCTTGGAGAGAGGTGGGGTCTCTGGAGTCTTGT$ CCTTTGATGATGATGATGCAGTTCCCCAATTTGGGAAAAATAACATTTATGAAGAGAAAATGCATGG TCATAGGAAAAACTGGAAAACCTCTTCACGAATAAACATGGCATTTTTAGTCATCATCAGATAATATTT TTAGGCATCCCTGATGTCCAAATTGTGTGACAAGTGACATGAGACCACAGCATTAATTTTAATATCCAAA TTACATTGTGAGAAAGCAAACACTAAGTCAAATTCTATCTTAATTATTTGATAATATACCAATTTCTAAA ATCTACACTACTTTAACCACTATTAACTAGACTAAATCCAGTTCCCAGGACTCAACAAATTTCAGTTAAT AAGAGGACTGTACTATAAATGGTAGCTGTCACCATCTACAGAAAGGCAATATAAGCTTCATTCCAGGTCA CTTTCATATTTAAATAACTTGAGATTACTACTATATTACTAGATGGGACCACTATTTTCATACTCTCTTT $\tt TTTTTTTTTTTGAGACAAGGGTTTCACTCTGTTATAGTGGTGCGATCTTGGCTCACGGAAACCTCTACC$ TCCGGGCTCAAGTGATCCTCCCACATCAGCCTCCCAAGCAGCTGGCCACCATACTCAGCTAATTTTTTGT CCCTCCTTGGCCTCCCAAAGTGCTGGGATTACAGGGGTGAGCCACCACGCCCAGCCCCTATTCTCTTACT TTTCTTCATATAAATACACAATTCCGATCATTGAGTGTTTAGGTTGATATAAGAAAATAAAATGCTAACC CGCCAACTGAATTTTAAATCAGGCAGTTCCTAACACTGATCCCGAGTACAAATGAACACCACCAGGTTAT ATTCAGAAGAGATGTGTTTTCCACTTGGCCACCCTGTGTGCACTGTGAAGAATGTGCAGGGTGATTTCTT TAAAGCTCTGCAGTGTGGGTAGAATGCCTGATATGCTCGAATGGTGGGAGTCTCCCTGGAGTCAATTTGA GGACTAACTTTAAAGTTATTACATCTAAATAAATTCCAGTTTTAAGAACTCTTACCGGTTCACAGAACT GTCATGGGCCCTTCTAAAATTAGAAGATACATATCCCATGTAAATACTAAAATAATAAATTAGGAACCCT AATACTGGTATTAAAATAATAATACTAATCATTAATAACTGAAAAATGCCCATGACCTCATCTGGCTCC AGGTGGGTAAGGTCTAGTTGAAAAGCCGAGAGAAGTTCTAGTTTATGGACAATATGAATGCTCTGTATTT TAATAAACTCTGCAATTATCCTACATTATTTATTCAGCTTACATTGAATCAAATGGCTAAAGAAAACTGA TTAATATTTAGGGTAAATGGCCGTAAGAAATGAACTCTACAATAATTTATAAAAGACCATCAACATCTTG ATTTTAAAATGCAGACCATTTAAGTGCTAGACAAGAACATTTTGCAAGCTGAAATAATCCTACCGCTAGT AACCACGGAGACCTAAGTCTGCACAAGAATCAGGTTTTAGAAACTGTCCAAACCTAGAGAAAAAGTGGAT TTAAGAAACAACATAAAACAATGAGAAAGACTTTTGCCAACAGTTCTAACAGGCTCCTGTTCATTTCGTT TTTCTGCCCCTGGGCAGGTGACACATAACCCTGAGGTTGGGGAGGAACTTGGGGGCCAGGGGGTACAGAG CAAGAGGAGAAGGGGAGACATGAAACTGGAGAAGAGAATGCAGCCAGAAGAATGAGAATAAAAAAGGAACC AAAAACAGAAGGTAAGGGTGGCTGAGGAGAAGAAAAACAGGCTGAAAAGACAGAAAATCATATAGCGTGA AGCCCCAGTGCCAGCTCCTGAATGTGTCTGTGGGAGGGGCTTGGGTAGCAAGTGGGACAGGATGGTATT AACTAGGACAGGGATCTTAAAGATTCAATGAAAGTGGTTCGTGATTTAAGTGTCACAAAATTGCCACTAC TTCCTGTGCATTTAAAGATGATATATTCCGTAGGAATAACCCCCATTACCTTATACTTAAAGGTGTTCT ATATAAGAAAGGTGAAACAGAAAGGACTCCTATAGGGTCTGACCCCTCCCCAACCAGGTATATTACAGTG AGGATCCGGGGACATCATGGCTCTTAGCTACTTTTGGGGGGCTGAGGGCTTTTGCAGAAGGCAATACTAGG ${\tt AGGTAAGGTGGTTGTTTTTTAACCCAGACCAAAAATGGTCACTAGGTAAGGTTTTAAAAAGTGGCCCAT}$ ACATAATTCTTTTGTGTGACACATTTGTTTCCAGTGTTTTGGATGGGGTACTTAAGGTCTGAGTTTAGCA TAATATAAACACTGTAACTTATTCTTTTTAACAAAAATACTGAAAGTATCCTGAGATCATCTGTGGTA GGCAGAATAATGACAATGACACCCCCCAACCCCCAACAAGACATCCAGATCCTAATCCTGGAATCTGT GAATATGTTAGATTACACGGCAAAGGAGAATTACGGTTGCTAATCAGCTGACCTTGAAATAGGGAGATTA TCCTGGATTATCAGGGTGGGCCCACTGTAATCCTAAGGGTCCTTAACAGCAGAAGAGGAGTCAGCTAGAG GGAGATGTGACTAGGAAGACAGACACAGAGAGATGCAATGTTGACGCCGTTGAAGGCAGAAGAAGGCGCA TGTGAGCCAAGCAATGTGGGTGGCCTCTAAAAACCAGGAAAAGCAAAAAAATGGATTCTCCCCAGAGCTT ${\tt CCAGAAAGGAGCGTAATCCTGATGACACCCTGATCTTAGCCCAGTGAGATCCATTTCAGATCTCTAACCT}$ CCAGATATATAGTAAATTTGCGTTTTTAAGCTGCTAAATCTGTAATTTGTTACAGCAGTAGTAGAAAACT GTAACCAAGGGATAGAAATGTCACTAAGGTGATGCTGAATTCTATAAAGACAGAATTTTCAAATCAACCA GATTGAAATTATGTGCCATTGTAGGATGGGAAGAAATAAGGCTAAGAGAATAGCAGTGGCTCCAAACTGT ATGCTTTTGGGAACAATTCTCTGCAATTTAATGTTCTGTCACACTTCGGATTTATAAAAAATTAACACA CAATCAACAGCCCCTGCAAAATTTAGCCAGCCATTCTTTAAGGGGAAAGATACTGACAGCTTCCATATAA TCTACCTGAAAAAACTCACCACTCAGGGTAAATTGTTATTTGCAAGGCCTTGCCTTTTCACAGTCTGTTC AAAGACATTCATCCTAGTGGATCACACTTGTAAGTAAAACTGATGTGTTCAGTAGCTGTGACTCCAATGA GAGACGCATTAAAATCTCTGTAATGTCCATTAAAATTCCATAATACTTATATCAATATCTTTTCTGCAC AAAGCAAAGACAGAGCCTAGATGACCTCCATGAAAAAGACATGCTTAAAGTTCCAAGGCTAAGTGGAAAA ACCAGTATTTTAATTTGTAGCATTACTAAATCATATCACTTTGAAAGCCAGATAACAGGTATCTTTTAA TGCCATCTACTCAGGAGGCTGGGGTGGGAGGATCACTTGAGCCCAGAAGTTAAAGACCAGCCGGGGCAAT ATAGTGAGACTCCATCTTTAAAAAAATGTCAACAGTAGTATCAAATATTAAATCTGGTGAAAAAGGTTC TTCAAGTCTGAGAATCATACTGCTTCTATGGTTGAAACAGAATCTGCCCATAGGTCTGAGAAAAACAGGT TACAAGTGAGAATGAGCATGTGGCCATGAGACCAGGGAAGGCAGGAAAGTGGATTCGATAAACCAGTGAC ATCAAAGAGCACCTGTCAGGTGGGTACAATGAGAAACACTGGCAGAACTCAGCAGCTTTCAAACTGCCCA ATTTCCAGGGTTGGCTCAGAGCATGCATATCTGATAACAAAAATGCACAGAGCATTGCAGCTCTTAAGAG GCTTCCTAAACTATTGGTCCAAGCATGTTCCTTATCACACCTTTTCTTGTTTTAATTTTTTAAAAAAGCT ATTGCCTTTCAAAACTATATTAACAAACACAACAAGATCAGTTAAAAAAAGACATAATTAAAAAAATC TCATTAACCACCAAGATTAAGGTTTGCATCTTAAACAGTATTCACACAGTTTCACAAAAAGCTACATGAA TGTGGGAGGGAGCACTCAAGAGACAGATATAAGAACATGGAAAGGTGGTCAGTTTTCTCTGGAAAAAGCA $\tt CGCGGACACCGTACTCTTGCAAGAGCTCATTTCTGATTGTCCCACCTGCTGCTCAGCGAGCCTCTTCTGG$ ATCTCTTGATCATCGCAGACATCATAAACAACAGGCTTGGAAAGCTCAGACTCAATTCGAGCCAACCAGG TGCGAAGGTTGCTCATGTTTTTGTCCAACTGCTGAATAAAAGCAAAGGTCTCCTTCAGCTTCTTCACCCT GTGGTGGAAGAATGTGCCAGTAAGAGCATTGCAGGGTAAAAAAGAATCTATTTTGCTTTGATTTTATATC AGAACAACTCTCATGTCACCAGATACGAGTTCTCAGAGAATATGTGAAGCTTTGCAAGGCTGTTGCCTCT GTTGATTTCAAAAGGACTGAGAGTTAATCCACCCATGCAAATGGAAGTCCTATCATTCCCAGAGTGAGA AATAACCACTCCTGACTTCTGCCCAGTTTCTGCCGTGGGTATGCCTGAGACTGCAGCCGGTGATCTA CCCTGGGAGATTAAAGATGTTACACGCCTGGTTCACTTGGTGGTATTTGGTCCACAAGGCCTCTCATGGG ${\tt ACCCTCCTCTGAGTAAGCAGAGAACATGTGCCAAGCCCTACCGCTTCAGTATGAGGGGTTCACCCAGC}$ AGGAAATCTGCACGCAAGCGCAGTTCTAAATGTGATCTCCCTCGCCAGTCTGCCTCAGCTCCCATCCGGC CCAACTCGGCGTGGAGCAGATTTGAAAGCACACGCATGGCATGAGTACAACTTGGCGTGCACGTCCACAT GCTGTCAAGGGGACGTGATGTAGCTGTTGGGGGAAAACAATCTTTTTCTGACATATATACTAAAATAAAA TGCTCCAATAAACCGCTTTCCTTAAAGTCCTAAAGCAGAGCGAGGTGAGCCAGGATCTGTCCTGGCGTTC TGTGGGATTTGTAGTTAATTTCAGACATTTAAAAGTAATGGCTCCAATGGAAAGTTCCCACTTATCAATA CTTACGTTGGGAGATGCTGTCAGAACTGCACCCCATAGCTGGGAGCACTAGAGAGATAAATGGGTGCACT GACCCTAACTCTCAGGAAGCATTGTGCTCCATGCCACCATCACCTCTTACTTGACCGAACAACCTCCTCT TGATCCACGCTCAAAGCCTTCAATAGTCCCTGCCCTACCCTGAAAAACCGGTTCAGCCCCTTGATCTCTG CAGGGAGTGCCATGGCCAGGCTGCAGCCGGCCAGTTTCCGCCGCACTCACAGCACCTCCCACAGGGCCTG GTGGGCAGGAAGCTCTCCACAAATGCTTGGTGAATGGACAAATACGGACAGGCACTTCCATGGGACTGAC TTCTAGTTCCATTACCAGCTACTTTTAAGATTTAGTGAAAGTCCTTTCACCTCAGCCCCCTTATTTCAAG TACACCCGCAAAGCTGCTTAAGCTTCAGGGAAGTGGTAGCATCGGGTGAGGGTGAGGGCCGGAACTCCAGA GGCAAGCAGACCTGGGCCCAAGTTCCATTCTCCCATCTAAGAGCTCTGCACCCTGCAATGTACCTAACCG CTGACTCTGAGTTTCTTCATGATCTGTAAAATTATCCACCTTGCAGGTGGCGGTGAGCTTGAAATAAGAG AGGCATTGGACCTCACAAAGTTCTTTCATCAGTGTTTTATTCTCAAGGGCAAGCTTGGAAGAAGGACATG TGGTCTGGAGGTGGAAGAACACAGACTCTGTGGTCAGGGCCTGGGTTTGCGTCCTGGCCATGTTTAATGC CATCTATAAAATGGTGTTAACAGTAGTACCTTCCTTCACTGGGTAGCTGAGGGGACTGAATGAGATATAA ${\tt CATGTGAAAGGCAGAATGCCTCGGAGATAAATGCCCAGCAACTTACAGTTGTGATAAGTTTCAAGGAGCC}$ ATGTTTTCCAAATTACATTCTTACTGCAAACACCACAAGGATACGTTCCCTTCAAAGCCACAGATGATTT ATTAAAAAGAAAGTAACAGAATCCAGGACCAGGCCTGGATACAGCTGTAACCTAGATCCTGCCTTCATTC CTATGGCTTCAGAGGTACACCCTCCTCACCCCAGTATCTTGCCACCTTGATTGCCCTGGTTCCAAAAAGA ACACTCCAGACAACTACCAGGGTAGCTGAGAACCCCTGGCACTGTGGGACAAGGAGTCCTCCAGGCAGTT CCTGAGGGACTGCCCTCCTGGAAGGCTCTGCTGGAGAAGAGGCCCAGCCACGAGAGCTTCCCGGGGGTGG GGGAAGGCTCAGGCTCGTGACCTCTGCACAGCTCTCCTGCCCTCCCCACTTCTCCCTCTTCCCAGAATG TAACTTAAAGCAATTAACACACCGGAAGAATTCAACTGGTTAAATGAAAGGAGCTAACTAGCAACACAAC AGCCTGGGTACAGATCCACAGGACTGTGGTGATCTTGAACTGTTAACCCTGGGGGTTAGGTGTGCAACAC GCAGAGGGGGTATGGAGAAGGTGGGGGAATAATTTGCTTGGTTTCCCCAGGGCTGTGGTATCCAAAATGG GGTGCTCAGAACAACCAATGGGGTGTAGGAATAAAATATGAGACTGTCTACTGTCATCCCATTCTTTTA AAATTTCTACAATGTGTATGCTTTAAAATTATAAACTTAATTATTAAAATAAAACATCTATATCCCACGC TTTTTGAGACAGAGTCTCTATCGCCTACGCTGGAGTGCAGTGCTGCGACATGGGCTCGCTGCAACCTCCG CCTCCCAGGTTCAAGTGATTCTCCTGCCTCAGACTCCTGAGTAGCTGGGATTACAGGCACCTGCCACCAT $\mathsf{GCTCAGCTAATTTTTGTATTTTACTAGAGACAGGGTTTTCCCCATGTTGGCCAGGCTGGTCTCGAACTCC$ TGACCTCAAGTGATCCACCTGCCTCAACCTCCCAAAGCGCTTAGGATTACAGGCATCATTTCCTCTTCATA ACAATGCTAGGAGATAGGTAGTATTATTCCCTACTTGACAGATGAGGAAACCGAGGCACAGAGAGTAA AGAGCTTGCCCAAGTCACATGGTCAATAGCGGAAGCAGGATTCTAACCTGGGTAGTCTGGTCTGGAGCTG GATCATTTTGCTGCAGTCAGAGAACATGACCAGAAGTCTGGACTCATAGCTCAGGATACACTGAGGGGTA TACATGCTGCCCACGTTTCCCCTCCATGATTTTCTTTCAGTAAACACTTAACCATTTGCCTTGTCTTGGA TCCTGCACAGACCCTGAGGATTCAGAGATAGCTGGAAGATAGGACTTCTTCCCAGAGAGGTCATCACCTA ATTTAGATGTAATGTTGACACTGTAATACAACATAGGAGTTGCTCAATAATAGCTGTTGAAGGAGTAAAT GATGTTCACTCATACCTTCCAATTTGTCTGATTTGTCTTCATAAAGAGGTGGCCAAATTAGATTTTT AAAGAAAAGAGGTAAAGACCAGAGCATATCAGAGCCCTTCTGCCACAAAGCAGTGTGCTGCCAGCCTAGG

AGCCACTCGTGCTCCTCAGCCCTGGTTTCACACAGGGCCAATGAAGCAGTGACGGACATTCACATCACAG TGGGAATCTAAATGTTGTTCCTCTGATCATCAGGTAACAACTTACCCTGGGACTCATCAGGTGCACTGCT GAGCGTGTATCGTTCTGTACAGACACTGTAATCTAATTATCACCTGTCCCAGGTCAGGAAGTATT TGTCTTTTGCCAACCCAGGCAACTGACCTCCACATTGTTGGGCCCTTGTTAACACTACTCTTGAAAAATTT AAAATCTCAAGTTAATATCTGGAAATGAGAAAACCTATTCAGAAACCAGACTGCTGGCACACAGAAGCAA CCACAACACTGCCTGACATCAACCACCTGAGCGCTTTGCTGCCGTGGCCACCATCTCTGCACTTGCCCAG GTTTTGACCCAGGTGCTCTTAACATTTCTCACATAGACATTTCAACAAATAACCTTTCTCCAGGAAAAAG CAGCATGATTTCCTGAATTAAATTCCAGTTATGAGAATCAGAAAAACAAAATTTTTAGGTACAAAAGCGA AGTCTTCCACCTGCATAGGCTCTTTATTGGGAGACCTGAACAAAAGCAAAATGTTTTCTATGAAACCAAA CAAAAGAATTATGCCTAAGAGCCGCTTTAAATTAGAAGAGTTCTTTTGCAGTGATTATGGGTAAAAATGC AGAAAACAATCAAGGCAAATAAAGTTTTTCTTTTAACTAGCAATGGATGAGAATATAACATTGATGAACA CTGCTCTCCCAACAACAACAAATCAAGTCAGGTTAGCAACATTCTATATACCAAGCCTAAGCCTTAA CAATGTATGATGAAGGCTTTACATGTCAAATTTATACATATGGAATAATTTACCATTTAGTCCTATCCTC TGTGCTCAGGAGTCTACAGTTAAATTATAAAAGCCCTAAATCAGTCTAAGTGAACAAAAAAATTCCTATG CCTAATTTAAAAAATACTAAGGAAAACTGAGATGGTTCAAGTATCTGAATTTGTACTGAAATAAACAAAT AGTCAAACCTGCGGGCAGCTGTCAGTTGCAAAAAACCTGTACAAATCCTGTACAATTGTATCTTTTCAC ATGACTAAACATCCTTATGGCAAAATAATGCATTACTCCAAGATCCTGAAGCCCTGATTTAGGGGCAGAG GCATTACAATACACGTCTGAGCTCATTGCCTCTTTAAAGCATTTTTGTCACCAGAGGACTTCCATTTTCC ACACGGCATAATCACTCCTCTGCCCTGCTTGTCAGAGGCAGACTGCAGACACCACACGCATGCTGACGCT GGGAAAGAACCCATCCCCCGATGGCTGAGCACAAACACTCCGCAGCCACCATCTCATCGGTGATTTCTAT GCTGATGACGAAAATGGCACTTACTGTTGATGAGAAAAAATCATTCCTTATGTTTAAGCGAAAGCTCCAA GTTCCCGGCTGCACCTCCACCTCCCAGGGCCGAGGCAGCCCCTCCCCTGCCCAGCGTGCCCTCTTCACT ACAGAGAAAAACATTTAGATTTGGGGCATGCAAAAGAGGATTTCTGTCCTCCAAAATTAAATTTCT $\tt CTGTTTCAGGTTTAAAAGAAACAGCAAAATCTGAAGCCCCTGAGTCCAATAGGAATGCCTTCCTCTTGTC$ CTCTTAAAGAAGAAATATCCCTGTGGGGGTTTTCTGCTCTGCCCTTTTGGTCCTGAACATCCTGGTTTAG GAGGGTCATTTAGTTTATCTGCTTTGTGCAAAAAAATTCTATTTTGCAGTATAAAGGGAATTTATTGCAG AGGAAGAAATTCTGTAATTTTCCTTGCTAGCTCCTCCCAGGGTTTACCATAATGTGTCTGAAAATTCCTC $\tt CTTATTTATAGCCTCAGTTTCTTCGGACAATCCTGAGTGGCAGTGCTTGGTTTTGTGTCTAGTCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTA$ GACTCATTCCCAGCCTTATTCTGAGACTTGATATCATTTTTCAGGAGTCCCTAAAGACCAACATTTAGTC ATTATTATCCCCACCTTGAAACGTAGCAAACACGTGCTATACCAGTGGAATCAGAAGTGCAGATCTGG ${\tt CAATAGTTCTCCCAAAATGCTGCATCTAACTCAGGCCCACGTGGTTGGCTGTTCCTGCAACCTGCTGAAC}$ $\tt GTGAACCTCTGAGGCTCAGTACACTGGACCTGCCTGATGCTGGCCATCAGGCCGCTTGCTCATTATCCTC$ TTTCCTTTGGGGAGCTCCCCAACCCTCAGGAAGGCATTTCTGCAGGGTCTGGGAACAGCGGCCACCCATT CTAGAGGCAGAAGGATCAGGCTGATGGGAAGGAAAATGGAAGTGAGGAGCCTCACATCTGGCTCTCCCTG TGCTAAAATAATCCCTAAATCCTTCCAGTCCCACTGGATCAGGCAACCTGCTAAGACCAACGCAAGTCAA CTTCGTGACTAGCAGCATTGTTTGGTGTTCCAGAAAACCTTGAGAAAATACAGATAAAAGGAGAGCAATG AAAAGCTTTATCAGTTTAAAAAGGCACACGTATTCCTGCCCATTCTGCAAGGCATGGAAAACAATCTTAA CACACAACTGCCACGGTCGTAACTTCTGAGTTTAACGGTAACATTTTAATTGCCACTACTATAAAGTAGG TGAGCTTTTCAGGTTGGTAGGCAAAATTTAGAAGTTATGCTTGGTTTAAAAAGTTCCTTTTATGGATTTG GAAAGTCCCTCCTTGTCAGTGGCTTAATAAGGACGACAGGCCTTGCTAGTGGTGCTACCATCAGAGAGAA ATTCAGGAGAGAACATAAAATTGATGACATTTGTTCATGACATGTTATAACATGACATCTTCCATAATGA AAAAACCAATGTAAACTTTCTGGGAGGGTATGCTTTTCCACTTCGCTGTCCAACCTGTATCAGATACTGA ACGCTTTCATCAGATTATTCACACATGCTGCTAGAAAGAGTCTTTAAAGAGTTCCTCACCCTGATCCCAA GTCTCTAAAAGAATTCATCAAGATGTGCAACCTGCCAGAGGGACTCACTGAAGACACAGCCCCACCTGTG ACAAAAGTAGATGAATTTTTAAGGAGTTCAACTACTGGGTTTTTAAAAATAAGGGGAGGCATAGGTGAGA ${\tt TCAGGTGGCAGGTCAACTCCTTCTCTGGCATCAGTCCTATTGAGGGGATGAGATCCAAGGACCGTCTTTT}$ CAGAGCTTTGGCCCGTGCTGGCTGTGAACGTTAACCTTGCATCTTTCTGTCTATCACCCAACAATTTGTA TCTCAACTGTTCTTAGGTAATCCAGATTCCTCCAAAACAGAGGAACACACATATTGGCAGTTCTGAAGGA CACCTTCTGTAATTTAGTTGTCTTGTCTTGCATTCAGAAGTTTTTGCTGAGTCACTTTTCAAAGACGTTATC ${\tt AAAGGCTGGGTGCAGGTGGCTCATGCCTGTAATTCCAGCACTTTGGGAGGCAGAGGTGGGAGGATAACTT}$ AGCAAACAACTATCCGGGCATGGTGTGTGTGTTGTAGTCCCAGCTACCTGGGAGGCTGAGGTAGGAGA ATTGTTTGAGCCTGAAAGGTAGAGGCTGCAGTGAGCTGTGCCTGTGTCTATTCCAGCCTGGGCCAT AAAAGTTTAACTCTTCCTTTAATTTGACAAATGAACGTAGTAGCATATAATATTTCTTGTCATCAAATCA TACCTGCATGTTTCATAAGAGTGTAGATGTCACCACTGTAAGAAGCTGCCTGAGGGCCCATGAGGACTTT TAAAAGCTCCCAGAGCAACAAGGAGGGACAGCCAATCACAGGCCTCTTTATACCCACACCAGGGCCCAAG TAATCTTATGTGCACATTCCTGTCCCGGGCAGAATTCCCATTGTCCTTGGCTAAATTATTTACCTTCTCT GAGCTGCAGTTTCCCTCTCCGTAAAATGAAGAATCACACTGACTTTGCAGTGTTGTTTTAAGAATTCAAA ${\tt ACAATGGAGGCTACCACCTGAAATGATCAGAAATCTAATGTGGTTTTTAAGGAAGCCTATCCTAAATCCC}$ ATTTTTTCCTCCAGTGAATTAAAACTGATTTATTGAGGCCTTGGACTTCTGAAAACCATTCTTAACCTTG AAGTTAGTTTATAGTTAAGATCTTGCAGTAACAAGGCCGGGTACCTATGTAGGATCACCTTCCAATCTT TTTTTTTTTTGAGACGGAGTTCGCTCTGTCACCCAGGTTGGAGAGCAGTGGTGTGATCAAGGCTCATTGC AACCTCCACCTCCCAGGTTCAAGTCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGCGC ACCACCACGCCCAGGTAGTTTTTGTATTTTTGGTAGAGATGGGGTTTCGCCATGTAAGCCAGGCTGGTCT CAAACTCCCGACTGCAGGTGATCCACTGGCTTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCGC TATGCCTGGCCGATCTTATTTTTAACAAGAGCTGCTGTTCCCTGCCCACAGGGCCAAAGCAGAATACTGT GGGAAGGATGGAAGAGGCTACATGGTGTCCTGGATCCTGTGGGCAAATGAAGCCATCAGGGCATCCCGCA GTACAAGGCCCAGGGTGAAGTCAGCATCAGGGATTCTATGTAAGGCTGATTCTATGTAAGGCTGATTATG ACAGGTCCAAGTTTGCTGCCTCAACCCACAGATTCACCTGAACAATAAACTCAGCTAAGAGCTTCTTAGA TGCTGAAGGGATTAGCACTCAGCACGTACTGCTCATTTCAGTGTTTCAAATGAGAGGGTCTGGGCTGTCA GGGAAGTGACACTGCCTAAGTTGAAATCCTGGTTACGTCACATGCTGGCTATGTAACTGTGGGTAAGCTG CTTAGCTTCAGTCCTCAGTTTCCTTCTTGGTATGTAAAATGGGACAATGGTATCTACTTTACAGAATCAC AGTGAAGTTTAAGTGAAATCACACATAAAAGGCATATTGTTAAGAATATAGGCAGCTGGCAATATATTTG CTATTATTTCAACTCCTTTTCCCCCAGCTGTTCTTTCCAAAAAGATCAATAAAATTTTACCCACTGTTTT ATCTCTTTCCCACAAAAGGTTGGCTGAAGACAGGCAAAGAGTGAGCGAGGAAAGCAAATAGCCTGTTAA ACTCCAAAGTGATACAAGCAGGATGAACGATTAAAAATGGACTGTCATTCTAACCTTCAGGAAACATT AGCTAGATCTTGATCCTGTATGATCCATGAATGGGTTTGATGCCATCATACCCTCGACTAGTGCCAAGGG CCCGAGAAGACTTAGGCTATAAAGGCGACCACAAAGACACAATTTATCCCACAGAAATTATCTTATTCTT AACGAATGCACTGAAACATTTACTCATTTCAACAAACATCTGACGCGCTATTCTAAGCTCTGAGAATTAG GTAGTCCAGTTGCAGGCCTCACTAGGGAAAGACCTCTCATCACTAGACATAACCAACAGAATCATCTTCC ACTCAATAAACACACGACCTAAGAGTCTTCTCATGGAAAAGTAATGAAAACAACCACTCCATAAATGCTG GCTCATATGTGCTGGCCCCATACCAAAGGCATGACACATATCCTCACAGCAGACAGCACCAGCGGCCTCT GATGTAAGCCAATTAGACCCATTTTACAGATTTAGCAACTGAGGCCTAGAAAGGTTAAATCACATACTCA TTCCATCATGCATTTCTGTAGGTTTGTTTTTTTCCCCCAACTGGCTGTGGAGAGATTGAATTTGGGC CAGTCTATGTTGCCAGCCAAATCCCCCTAATATTTGTCTTCAGCAAACCCTCCACTGCTAAGGAACCAGG CATGACTCAGATATTTTTCAGAAGGCCAAGTATTTAGCAGAGATTTAAAGTCTTCTAAGATTTAGCCCC AGCCCATCTTCTAGCTCATCTCCTATGCTTGGGGCCCAGTGGGGCTTCTCATCACTTCCTGAACGGCTTC TCCCTCATTCAGGACCATCTGGGAACGCAGCCCCTCTGTAAGGCTCTTCCTAATCCCAGGAAGATGGGAT CTGAGCTCTCAAACCACTTGGTTTTACAGATGCTCAGATACCTACTCCCACTAATGTAACTGACTCAACT TTTCCAGTAAACAATGAGGTAAAGAAGATGCCAAACTTAATAATTTAAATTATAAATTTAAATAATAAT CCAATTCTTTATTCACCTTATAGGTTCTCCTGTATATTCCAAATTCTATGTGTTGTTCAAAACATCTGAG CACACTGCTATGGAAAGGACCCGTGTGGCCAGTGGAAGCACAGCTGCACAAGTGGTCCCAAGGCCAAGTG GAAGACATTTAAAAATTTTGGGCATCATCATCTTTTGGGAGGAGAGATAAAATTATCAGCGCTATTTCT GATAAGATTGCACTGGCCAATATAGCTTTGATTTGTGGTCCTTTGATTTAGGACTGGGCTGCGCCCAAAT CCACATCCTAGGACAAGACACCCATGGGAGACCTGGCACTCTGAGCCCACACACTTTAAGAGTAGACTCC TGCCCCTGCCTTGAGTGCAAGTAGTGGGGCAGTCATGGGCCCCCAGCATCCAGAAGCCAGGCCTGTGCCC TTACCTGATCTGCCATACTGAGGCAGGAGCAACGGGCATGGCTCCACTGTGGGGACACACAAATGCTAAC ACAGAGGCAGAATTTCTAAACAATACCCCCTCCCAAGGATCCCTTTCCAAATCAGTTTCCAACTCTTCAT TAAAACTACTCTAATTCATGTAAAGTTGTAAGCTAAAGAAAAAATATTAAGGTGGGATATACTAGCATAT AATTCTTTTTGTAACACTGAAAGAATTTCCACTCATTTTTATCAAACTTTGCCTTAATCTGTAAACTTAT AAAATTGCTGGATCATCTTAGAGGAAGACTGGGTTCAGTTTACTAGATCTGTAAAGTAATTACTGTTCCT GGAGAGTAATCATTTTTAGCCCATTTCTTACCTTGATCCGATGACATCAAAAAGATGTTGCCAACGATCG TTAATTTTGTTGAGCTTGTCATCGATCTCAGCTGCTCTTGATTTGTTGCTGGCCTTGATCAACTGGTCAC CCATCTGCTTTAACTGTAACTTGTTTTCACTAAACAAGTTTATTTCTTCCATGCAGTCCTGGCAAAGGCA CCAAAACATAAAGCCTGGCTAATTAGCCCAAACTCATTTCTTCTCCAGCCACAGACATAGAGTTACCTCT TGAAATTAAAAAAAAAAAAAAAATTGGCCAGGCATAGTGGCTCATACCAATAATCCCAGCAGTTTGGGA AGCCGAGGCAAGAGGATCACTCTAGTCCAGGAGTTCAAGACTAGCCTGTGCAACACAGCAAGACCCCACT TCTAAAAACACTAGCAAGGTATGCTGGCACATGTCTGTAGTCCCAGCTACTCAGGTGGCTGAGGTGGGAG GACCCCTTGAGCCAAGAAGGTTGAGGCTGCAGTGAGCTATGATCTCGCCACTGCACTCCAGCACAGTGAG ACACTGTCTCAAAACCTCATACCTTCTAATGAAGCTAACTTTTCAGTGAGCAGCTAAAAAGTCAGGCAAC GCGCATCAGGCAAAAGCAAAATATGTAAGGCAATAATTATTTTAATAGTTATTTAATTCAAAAGCCCTC TGTTTCCTCTCACAGATTTCTTCTAACCTACGTGGGAGCTGAGGACAACTGAGCATAACTAATTAGGCTG CTATCAGTTACAGTTTTCCAGAGGTTTGACTGGGTGGTGTTTTAGGTGACTACAGCAAGAATGTTATTAC TTTTCCCTGTGGAGACCACTGATCATTCAAAATTATGAGCCTCACTGCTGTTGGCCTCTCCCCTTTAAC AAGGGGAGCTTCTTTTTTTTTTTGAGATGGAATTTTTGCTCTGTTGCCCAGGCTGGTGTGCAATGGCAC CATCTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCAATCCTCCTGCCTCAGCCTCCCAAGTAGCT GGGATTACAGGTGCCCACCACCACCACCAGGCTAATTTTTGTATTTTTAGTAGAGACGAGGTTTCACCATG TCAGCCAGGCTGGTCTTGAACTCTTGACCTCAGGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTAGGAT TACAGCAATGAGCCACCACGCCAGGCCAAGGGGAGCTTCTTAATAACAACTAGAGAAACCCTAACTCACT TGGGGTATCAGCTGACATGTAAGGATATGTAAGCCCCTTCCCTGGTGAAACTTTCTAATGGAGAAAAGC AACTCTCCTCGGTACCATGCCCACTGACAATGGTCTCACACTCCCATCTCTCTGGAACCTCCTCTTCC AACTGTTCTCTCAAAAGGATCGAAAATAGTGAAGTCCCTTCAAATTTCTAAAATGCTACTGGAAACACCC

GTAACATTGCCCCTGTTTGGGCTTAGGAGTGAGGAGGGCCGACAATTCCATGGTAGTCATAACTACATCC GAACTTTGTTTTCCATCTGCACCAGCCAGGCACACACTCTTTATTTTTTTCATTGAATACAACCCATGT ATTGAGTCTGTCTTCAATCTCCTGTTTACGTATGGCCACCTGCAAATGAAAATACATTTGGCAGCTGAGT TCTCCGCACTCAACCTTGTCTGGTTTTGCCTCTTCTAAACCTAGGGTTTAGCATCAACAGAAGTTCCTTA CACCTGTGATAAATGTCATAAAAAATAACAAAATAAATACTGTACCTGAAATGTAGCTGATTGGAAGGAT TGTTTTTATCCAATACTCGTGTTACTATCTGGTTATAGTAAAAATTAGAAACAGGAAAGGCTAGATGA AGATATAACCCAAATCCTTGCCCTTATAACAACGAATCAAATCCTTATACCAACATAAGGACAATGTCCT ACTACAGCCGTTTAAATGTCCTTAGTGTTATGCTTCAAAACAAAGCAAAACCAAAAACAATGTACATCAC TCTGCAGCAAGCAGCTGACCCCAAAATACCCAATACCCCATTATGCATAAGTAACCCCTAAACTGACAT CAGCTAAGGGTCCTCCTTAAAGGTTTAAATTTCACTAAATATAAATTTAAATAATGCAAATCAGCCT AACTAGATGTACAAAAGTATTCCCAGGTTTTAAGAATCTTCAGAATCTTAGCGTTAAAAGGGGTGGCTAA GAGTTCTTTTGGTAAAGTTTTGACACCCCACTATATGGACCAGGAAACCAAGGGTGAATTCTCTGAGATT TTCCTGCTGTGTATAAAGAAACCTCTGCTCTTTTCGGAGGAGAAAATACTGAATGCTTATATATCCTAGC ${\tt CAGCCAAACGTGTTAAAAAGGCTTGAAAAACTATCCTAGAAAAACAAGTGTTGTGTTTCCATTCCTCGGG}$ AATTAGGAACATCTGGGCCCCAGTCTTCCTGTCTACCTTAACTTTCAGAACACTTTTCATATATTCTAAA CATTTTCTTTTGTATAAAATTGAAAAGTTCTAAAAGAACATTTAAAATTAGGGTACATTGTGAATATTA GATTAAGGAATTTATTTTCGTTGGAATTCTCTGTTCTTAAAACAAGATCTTTAAGACTATTTGAACCCC TTAATTCAATACTGATCCTGTCACAAGCCTATACCGTGTAATACTATTAATACAATCCCATTCTTAAT AAGTTGAAGTGATCCATTGAGACAACATAGCAGTTGATCATTTCTCTTACAGGATTTTAGAAACCAGCTA CTTGAAATAAACATCAGGTTCCTGTGAATGCAGAGTACTCATATGAAATGCTCCCATGCCTGGTGGGCAT GAAGTAAGACTCCTGCTGTTAGGCCCAGAAGAGACTCCCCAGTAAAGGACCTCTTCACTGGGTCCAGCTT $\tt CTGATACACTGATTAGGACTTGCCACCTACACAAGCCAGAGAGCAGTCTACACATCTGATCAGAATTGCA$ ATTTCTGTCTCCACTTAAAGTGACTTTTTAAAAAAGCTCATTAAAAGCGTGCAAAGTTCTAGCATTTAGT GCTGGAGAAACAAAGGGTCAAATCTGTTAAACCTGTTGCTGCCTTCTAAAGGAGCAGCGGCCGGGCCAG GGGTCCCACTGAAAAGGGCCTCCGGTTCAATGAAATTAAGCTCCTTTCTACTTTGTCTGGCCTTCAGAGA CATTTCAATCCACTCCCAAACAGCCGTGCCCTGCAGTGAGCTGACTTACCCTTAAGCAGAGGTCCTCCCA ${\tt TCCGCCTTCATAGTTTGAAGTTCTTTCAAGTTCTGAGTCCAGCCAAAGACTGTTCTAGTTCCTGCA}$ TTTAATCACAAGAAGGGGGTAAAAAGCCTTCAACTCAAGCGGCTGTTGTTTCCAAACCTGTAGGCTAATC GACGAGCGCCTGCAGTTGTGGCTGGCCAGTTCTCCACCACCTTCTTATCAAAGGAAAACTCTGTTCTACC TTTATTTCATTTCCTCAGGTAGCTCTGATTTTGATAGAATTTATTCTATTTTAAAGTCACATAGGTCTT TAATCCTGAAACTACATTTCAGATAAAGTGTGATTTTCCATTTAAAAAAACCCTAAGAAATGCATTGCTG CTATTGTGGCAATCACGTAACAGCAACAACTTCTGTTCACAGGGAATTATTTTTGGTTAACTTTTGAAAA CTGGCCATGGAAACATCTATCTTTTAAAATGCAGCATTGGCTGGGCTCAGTGGCTCACACCTGTAATCCC AGCACTTTGGAAGCCCAAGGTGGACGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGA CTTGGGAGGCTGAGGCAGGAGATTGCTTGAACCCAGGAGGCGGAGGTTGCAGTGAGACAAGATCGCACC AGAAAAAAAAAAAAAAAAGAGCATCTGTCAAATTGAAACCTTCTGAAATCTAGGATTTACTCAAGAGAT TTACTTTCACAGCAGGGAAGGTAAAAGGAAACAACCAGAACACTCAAGAGTCTACCAGATTTTTATTGTG CTTACAATTCTTCATGACTTGGCACATTTTAAGGGTCTTCACTCCTATCTGTCAAATGAAATCTGAAATA AGATACTATGCCTTTTTAATTTTTTTTTTTTTTAAGAGACAGGGTCTCACCCTGTTTCCCATGCTAGA CTACAGTGGCATGATCATGGCTTACTGCAGCCTCGACTGACCTCTTGGGCTCAAGTGATCCTCATGCTTC GATGGAAGTCTCACCATTTTGCCCAGGCTGGTCTCAAACTCCCCAGCTCAAGTGATCCCCTTGCCTCAGC CCCCTGAAGTGTGGGGATGACAAGGGCGAGCCACCATGCCCTGCTGATACTATGCCTAAAATCAGGGATA TTTCATAACTTACCAACAAGAATTTATGTTTAATAAAATGGCCCAGAGAATTCTTTTTAAAGGTTGCATG AAGATTGAGGAATTAACACCTTTCTCAGAAGATAAATCATTAGGTATTTAACATTTTTATTACCTACTTT TGGTCTCACGATTGGTTCCAGTAGATGACAGCAGATTCCACAGTGGAACACTTTGGAAAGCTACATAACA TAAAGGGGCCACCTGCCAGCTGAGGTGTACCACTTACTGACTTGAATTGGAGATCTGGAAACCTCTGA GCTTCAAACAGAGTTTCCCAGTCAGGTGGCAGGAAGCTCAGCCTGTCCAGTGCCCTGCTCAGAGGTGCTG GCTCGGCCACCGAGTTATGCCCGGCCAGGTTTCAATCAGTTTGGATTTGAATACTTACAATATTGACAATC GGAAAGTGTACAGTCACTGGATAAGGTTGAGACTCCTGTTTTACTCTCACTGCCCTGCCCTTTTCCCCTC CAGTGTGGCTCTCTGGCAGACTGGACCATTAGCTCCACACATGGCAGGGACCATGACAACACTGCTCACG GATTCAGTGCCCAGAACCTGCCATGGTGCTGCTGCACAGCAAGTTTTCAGATACCAAAATGTACGGCTGA AAGGAAAGCAATTTGGCTGTATGTCTCGAGAGCTTTAAAATGTTCATAAAGACTAAATGAAAAAAGCAGG GAGTCAAACAATATATAGAATGAGGTCTCTTGTGGAAGTTTACTAGAGCTGACGATCAGTTTGTATAAAA ACCCCTCCCTCTCTTTCCACGTCTCCCTCTGATGCCGAGCCCCCTCTCCCTTCTTTCCACGGTC TTTTTTTGGTGGAGACGGAGTTTCGCTGTGTTGGCCAGGCTGGTCTCCAGCTCCTAACCACGAGTGATCT GCCAGCCTCGGCCTCCCGAGGTGCCGGGATTGCAGACGGAGTCTCGTTCACTCAGTGCTCAATGTTGCCC CAAAGTGCCGAGACTGCAGCCTCTGCCCGGCCGCCACCCTGTCTGGGAAGTGAGGAGCGTCTCTGCCTGG CCGCCCATCGTCTGGGATGTGAGGAGCCCCTCTGCCTGGCTGCCCAGTCTGGGAAGTGAGGAGCGCCTCTTCCTGGCTGCCATCCCGTCTAGGAAGTGAGGAGCATCTCTGCCCGGCCGCCCATCGTCTGAGATGTGGGG AGCGCCTCTGCCCTGCCGCCCGTCTGGGATGGGAGGGGCGCCTCTGCCCGGCCGCCACCCTGTCTGGGA AGCCGCCCGTCCGAGAAGTGAGGAGCCCCTCCGCCCGGCAGCCCCCCGTCCGGGAAGTGAGGAGCGTC GAGGGAGGTGGGGGGGCCCCTCTGCCCGCCCCCTTCTGGGAAGTGAGGAGCCCCTCTGCCCAGCCGTC ACCCCGTCTAGGAGGTGTACCCAACAGCTCATTAAGAACGGGCCATGATGACTATGGCGGTTTTGTCAAA GACATAGGAGACTCCATTTTGTTCTGTACTAAGAAAAATTCTGCCTTGGGATGCTGTTAATCTATGACCT TACCCCCAACCCCATGCTCTCTGAAACATGTGCTGTGTCCACTCAGGATTAAATGGATTAAGGGCGGTGC AAGATGTCCTTTGTTAAACAGATGCTTGAAGGCAGCATGCTCGTTAAGAGTCATCACCACTCCCTAATCT CAAGTACCCAGGGACACAAACACTGAGGAAGGCCGCAGGGTCCTCTGCCTAGGAAAACCAGAGACCTTTG TTCACTTGTTTATCTGCTGACCTTCCCTCCACTATTGTCCTATGACCGTGCCAAATCCCCCTCTGCGAGA TAAATTATCTATACCACAAGAATACCTGAAAATTTCCAATTTTTTACGTAACATGGGATGTAAAAATTTCA AGTTGTTTGGCTGCGAAAAGCGGTGTGTTGCACAGGATTTGACTGGACTCTGCAGTATCAGGACAGCATC TAAGCCTTGCCTGTGGACTCAATTACCAGTGGAACTGTCAAGTCCCATTTCTCTGTACTACCATTTGGGT AAAGGAGGACCAAAAAAGAACGGGTATATAAATAAAATTTGACCTGCATATGCATACTCTATCTTTGGAA GAAAATACAACAAACTTGTAACATTGATTGCTTCTGTGGAGAGGAACTGATAAGAGAAAAATTTTACTTA TACAAAAATTATTTAAAAACCAAACTGTTCCAAGGACTCAATCTTTGGACAAGTGTTATGAAACACAGAT GTCCATTGTAGCAATTTTCATAATAGTGAAGTTAGAATATATGTAAAACATATATGTAAGGAAATTATTC TGTGCTTAGAAGGGAATATAATTTTATGAGGAGGAAAGTCAAGCTCAAATTGGTCAAGTGGCTAGCGTAT TTCCCCCAGGTGAATCAGGGATGAAACACACTGACCTGGACAAGCTTTGGGTTACTTGGGATCTTTTCAG AATATGGTCACGGGTTGAACGAACTCAATGCTTTTTGCCTTTCCCTGATTACTTTCCACTGATAAATAGG ATGCTGAGACCGTGAAAGCTGAAAAGATCCCACTGGAAACTGAGAAGTGTGATACTTGAGAAAAATTATG AGCTGAGAGCATGACTCCAAATTATTTCCGTTGTTACCAAAGTCTTGCTCTAAGCCTAATGAGGTAGGGA ACCAAATATCACATTTAACAGTGAAATGTTAGAATCATTTTCTTCTAAAATCAACAATGGAAGACTCAGC ATATTAAAAAGAAGAAACAAACAAAATAACCTTGTCATTATTGACAGATGATGATGGTCTCATAGACAC CCAAAAAAATACATAAACGAATTATTGGAATTAACATAAGAGTTTAACAAGATGGTTAAACATAAATATG CAAAGACCAATTACATTTCTAGGCATCAGCAATAATCAGTTAGGAAATATAATTAGAAAAAGGCAGTATT TTCAATAGCTTCAAAAATATTGCACCAAGAAATAAATCTAACAAAAGATATATCTTTTGTGATTAGGAAA ATTATAACAAGAATAAGCCAGGTGTGGTGGCTCAGGCCTGTAATCCCAGCACTTTGGGAGGCCAAAGCAG GTGGATCACCTGAGGTTGGGAGTTAGAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAA TACAAAAATTAGCTGGGCGTGGTGGCGGGTGCCTATAATCCCAGCTACTTGGGAGGCTGAGGCAGGGGAA TCCCTTGAACCCGGAGGCAGAGGTTTCAGTGAGCCAAGATCGTGCCACTGCACGCCAGCCTGGGTGACAA GAACGAAGCTCCATCTCAAAAAAAAAAAAAAAAGTTATAAACCATTAGTGAAAACAACTAAATAATATGA CCAAAGGGAAATATATACCACAGTCATGAGCATGAGCAGGAATACTAAAAATAATTATCCAAGTTAATCT AAAATTCAATGCAATTCAATTAAAACTCTTATCAGAACTTTTCATGGTTTAACAAGCTGTTCCTCAAAGT TACGGAAGATCAAAGACCCAGGGACATCCAAAGTAATGTGAGAGAACAAGGTGTGGGTATACATCACACC TGAAATAAAGATGTGTTACAATAAAGTGCAGTAATCAAGACAGTTTGATATTAAAGCTGACATACACAGA CCAGTGGAACAGAGAACTGAGAAACAAATCCTGCGTTTATGGAAATTTGGTATTTGACATTAGACAATAA ATAGGCACCAAGACAACTGGCTATCCATACGAATAAAATTAGAAAATGGATCTCTGCCTTAAAACGTATG CAAAAATCAATTCCTCAATGAATAAAGATGTGAATGTGAAAAATCAAAAAACTAAAAACTTTTTGAAGAGAA TGTAAGCACGTATTTTATGACTTTAGTATGAAGATTTTTGCAAAGGAAGCGGAAAATACAAATCATATAGG GAAAAACAGGCTCTCAGATGGGAAAAGACATTTGCAATGTATATACTCAGTAGAAGAGGAATATTTAGAA TAAATAAGCAGCTCCTTCAACTCAATAAGAAAAAGACAAATAGCCCAATGGAAAAAAATCAGTAAAAGGC ACAAATAGGCAATTCACAAAAGGGCAAATATGAAAAAAATGTGCAACTGACTAATAAACTATAAAGAGAT CAACATCTATGACTCCAAATCACAATGAGGGAAAAAAGTTACATTGTAGGCCAGGCGCTGTGGCTCACGC CTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCGCTTGAGGCCCCAGGAGTTCAAGACCAGCC TGGCCAACGTGGCGAAACACCATCTCTACTAAAAATACAAAAAATTAGCCAGGCCTGATGGCACATGCC TGTAATCCCAGCTACTTGGGAGGCTGAGGCACGAGAATTGCTGGAACCCGAATGGTGGAGGTTACAGTGA ATTACATTATATAGTACTGCTTATATAAAGTTTTAAAATTTTATGTATTTTGTTTTACTTTTTAGAGACA GTCTTACTCTGTCATCTAGGGTGGAGCATAGTGGTGCATTCATGAGTCACTGTATCCTCGACCTACTGGG CTCAAAGGATCCTCCCACCTCAGCCTCCCCAGTGGCTAGGATCACGTCAAGTGCCACCACACCCACATCCAGCTA ATTAAAAAAATTTTTTGCTGTACATATGGGGATCTCACTTTGTTGCTCAGGCTACTTTCAAACTGCTGG

ACTCAAGGGATCCTCCCGCTGCAGCCTCCCAAAGTGCTGGGATTATAGTTGTGAGCCACCATGCCTAGCC ATATAACGTTTAAAAACAGAAGCAATTCTACATCTCATTGACAGCAGGCTGGGCGCCTGCTGTCACTTT GGGAGGCCAAGGCAGAGATTGCTTGAGCCCAGGAGTTGGAGACCAGTCTGGGCAACATGGCAAAACCC TGTCTCTACAAAAAATTAGAAAAATTAGCCGGGCATGCGGTGCATGCCTGTACTCTGGGCTACTCGGGGG GGCTGAGGTAGGAGGATCGCTTGAGCTTGGAAGTTGGAGGTTGTAGTGAGCTGAGACTGTGCCACTGCAC ACACATGTATTAAAATTATTAGGACATGTGTAAGAATGATGAACACCAAATCCAGGGTTACTGACACCTC TAAGGAGAAGTTAGATCATACAGGACACTTGAACTGTGTGTATACTTTTTAATTTTTTAGCTAGGTGATG GTGTCATGCAGTTTGTCATATTATTTGTTATGCCTTTTAGCACATCAGACATTTTTACAACAAAGAAAA AAGATGTAGGGAGAAAGACACTAATTTCTGGCCTAATTTGAAGTATAACACTATTCATTTCTTCCTAATT TTTTCAATTTGATCCCCGAAAGTCACTGAAGGAAGAAAAAAATTAAAATACCACTCCAACAGTCTCTCAA TGTCTTTTAAACATCAAAGCTGCAGACAGAAAAGAGATGCAGGGAGTTGCTGACCTGGGAATTTTCCTGG CCCCAATTCCTATCCATAAGTTTGCCTTGTCTCCAGCAAAGGCCTAAAATATCCAGGAAGTTTTGCTAGT GTGGTATTCATTAGGAAGAATATATAGTTTGGATGGTTTTATAAAAATGCTATACTGGAGCAAACTCCAA CCTACTGGCTTTCAAAAATGAATTCTTTAGTCATATTTTACTCTTGTTTCAAAGAAGAGGACATTTGATA ACCTGAAGGAGAAAACCCCTAAGATCCTAAGAAGTGAGTTTTTGCAAAAGTCTTTCTCGTCTTCAAACAA CAATCGTAAAAAGCATCAATTCTAATTCCTTAAGAGACGAGCATGTTATGTTAGACAGATCGGGAAAATA TTTTCTGATTGAAAATGAAAACTCAGTTTCAATACAGAAAGAGGCAAAGAAGCACTTCAAAGTACTCAGA AAACAGCTAAGTGATTATCTTGGCCACTTGTTTGGATTTCAATACCTTAATCAGCTCTTTTTCGTTATGG AGGTCCTCGTGAAGCTCTGGAAGAGGATCTTCACTTTGTGCCTTTAAAACTTGCAGCCTGCTTTTCAACT CCTTGATTTTCTTTTCACACTGGTCCCAGGTCTATTTGAAAACAAGATTAAAACTGGTAAGTATTTTGCT ATAAATCACACAGACACCCAGTTCCCTGTCTTAAGCAGACTATGGTCTCCAAAAGCAGAAGGAACACCAA TATGACTCGACCCTCCTTGCAGCTTTACCTGTGGCTCATTTCAACCACCAGGCTAGGCTTTGCTTGAAAA TAGTTCTTCCGGGCTGGGCATGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGG ATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCGAAACTCCGTCTCCACTAAAAATACA AAAATTAGCTGGGTGTGGTGGTATGTGCCTGTAATCCCAGCTACTTGGGAGGCTGAGACAGGAGAATTGC TTGAACCTGGGAGGTGGAGGCTGCAGTGAGCCAAGATTGCACCACTGCACTCCAGCCTGGGTGACAGAGC TCCCCAATCCCTCTCATCTAACCAATGTGATTTCTACTTTAATTTTTGGAAAAGTTCACACCTAAAAGGCT ACTGTACGGAGTAACTGTTAGCATTGACAGTCTTTGGTATATGCTATGACAGCACCACAGAACACAAGCA CTTCTGCTTAAAGCACTTTCCTGTTTACAAAGCATTTTCAACTTTATTAACTCATTGTAATTATAATAAC CTTAGGAGATAGACAAGGAAAGTATTATCATATTTAAAACAAGTATTATCATATTTAAAATGGGAAAACT AAGGCTCAGAGAAAAATGACTAGCCCGTGGATCTGGGGTTAAAAGCCAAGTCAAGGGTCAACCATCTCTT TTCTTCAAATTTTAACTGTTGAACAAATAGGTGCCTGCATTTTCAACTATAGGGTATTTATATTTCGATT CATTAGGATAAACTTCTTTCCTGAAGTTACTAAAACTATACAAACCTACAATGAAACACTATTATTCAGT ACAGCTGATACCTAAACATACTTGGGTTGGCCTCAGTCTATGGTAACCTCTCACTGAAGGGAGGCCACTT CAAACTGTTATTTGCAATTATCATTATGCTTCACAAACATGGCAGATGCTTAACAAATGTTTGCTAGTTA ATGAATTCCATATAGTCCATATATCAAATAAAATTCAGATACTTTATTCACAGGAGAAATTTTCAAGCCC TAACTCAGCATATATTTACTCTTAATTCAGAAAAATATGTCTGGTAAGTTTTGGTTATCTAGTTTTTGGCAC ACACGACAGACTAGAGAGTGGGCTATAAGAAGTAAGTGAGCTTGGAGAAAGACAAAGTAAAAATAGAC AGTTTGACATTAAGAGGAGAAAGAAAATGATAAAAACCATATCAGAACTCAAAGAGCACAGTAGTTC AGGGAGGCCACAGGTTCAAAGTAATTCAGAGGCCTTGAGAACAACTTGGTATCTTAGCATAACAAAACA ATAATGATTTTCCTAACAGTGACTCAAAATATAACACTGTAGTTCTTAAAGGTATAATCATACATTATTT TCTTAATAGAATCTCAAGTATTTAAATACTAAACATTGAGCTCTTGCAATGCTATATCATCATTTCACAT TAAGTAACTGGCATGACTTACAGATTACAGCTTGAGTTGGAAACTCATGATACTATAGTTTCCTAAAACC GTGAGTTTACCTCTACAGTGCTCTGGAACTGCTTAATCATCTCTGCCAGCTGGGGCTCCATGTCTTTCCA GCTGTCCTGAAGTTGACTGATTCTCCTACCCACAGACTCTTTAGTTTTCAGGTCAGTTGTGAGCAGTAAC TTTTCTCCAGCTTCCAAGGTTAGGGCACAGGTAGTTCGCCTCCTTTGAAAATGAATTTCTTTATTCTAAG CACACACATCAAAAGCTAATGTTTTACACTGAGTAGATAAGCATACCACTAAGTGAGGTGTTCTTAAAAT CATCATAGAATAATAGCCTGCAAGGTAAATGGATCTAAGAGTATTAAGAAAGTGAATGGAGTAACAGACC TGAAATCAAGTAACAGACCTTATATTACGCTAAACAAATGTAAAAGGAAAGAACGCGAGAAAGGGTAAAA TACAAAAATATACATTTCTTAAGCTTTTTATGAGCACATAAACATGTACATTGATGTGCCCCCAAAGG CGCAGCTTTAAAAAATTTCATCCGAATATCATGTAGGCTTTCTGAAAATTAAAAACAATTTAAAAACAAT AGTTTTAGACCCGAAGTGATGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAGACAGCCAGATCA GTTGAGCTCAGGGGTTCGAGACCAGCCTGGCCAACATGGAGAAACCCTGACTCTACTAAAAATACAAAAA TTAGCCAGGCATGGTGGATGCCTGTAATTCCAGCTACTTGGGAGGCTGAGTCCCAAGAATCACTTTA ACCTGGGAGGCAGAGTTGCAGTGAGCCAAGATCACCACTGCACTCCAGCCTGGGTGACAGAGTGACG CTTTGTCTCAAGGAAAAAAAAAAAAAAAATTTAAGAGACAAGGTCTTGTTTATTTTTATTTTTTCTAT AGAGTAGCGAAGGTCCTGTTTTTTAAGAGATGCGCCACCACACCTGGCTACATGGGCGTTCTTTAAAGAG ATTGAAACTAGGTATTTATAATACAAAAATAAAGTAAAAACTTTAAAATTGATCCATACTCCCAAAGGCA TGAGTGCCTGTGGTCCCAGCTACTCGGGTGGCCGAGGTAGCCTCACCAGAAGTTTGAGGTTACAGTGAGC AATAAATAATACATAAATATTATTTCCTTCACCTTGAAATTTCTTGAAGGAGACAAAGTGTGGGCATTTT TCCAAAATGGGAGCTGATAAACATCAACAGAGCATCACTAATTTACAAAGGCATTTCTGAGAAGCCTGAA GATCACCCATACCCAAAGGAGGAAAGCCAAATGCACCCTCAGGAGCACCACAAATAAGAGAAACAGCA ACTGGACCACAGGCACTCCACGTGCATCTCTCCAACATATTGTGCTGCGCAAATGAGCCACTCGTATTAG $\tt CCCAGAGTCGTCCTTCATCTAGCTTTTCCTTTACCAGACTCACAAACCGACACTCCAAAATACGGTGTTT$ TGACACGCTGAACTGAAGAAGTCTCAGGGTCTCTCTACCCTAACGCACTGCGTCTCCTACAGAAGCTGAA CATTATCTTATTGCAGAAAAGAAGACCCAGATGTAACCACACCCAAATAGGCTCTTTCAAGATGACTGCC GGCTGGAGTGCAGTGTGACCATGGCTCGTTGCAGCCTCAACCTCCCGGGCTCAAGTGTGACCCTCCT GCCTCAGCCTCCTGAGCAGCTGGGAGTACAGGCGTGCACCACCACCACCTGGCTAAATTTTGAATTTTTTT GTAGAGACAGGGGTCTCACTATGTTGTACACAGGCTGGTCTCAAACTGGGCTCAAGGGATCCTCCCACCT ACTCATGTGGACACATATGATAGCCTTCATTGTTAGAGTGTGGCAGAAGCGATATATGTGACTTCTGAGG TTGGGTTTATAGGGCAATACAGCTTGTTCTCGGGATAAGAATCTTTGAAACCATTGGGGTACCATATAAG AAGTCTGGCCACTGGAAGCCCTCACGTGGTAACACAACAGAGAATGATGCCCAAGGAGGAGGAGCTCCACT CAGCCCAGCCACCATCTGACTGCAACTGCCTGAGAGACCCCAAGCAGGAACCACCAACTCCTGTCAACC CCAAGAATGACGAGACAGAATGATGAGTGTCATTATGCAGCGATAGGTAAGTGAGATGTTAGGATTCCTA CTTTTCCTTTAGCTCCCCTACAATCAGGAACAGCCAGAGTGATCTTTAAAAAATATGGGGCTGGGCACAG GACCAGCCTGGCCAACAGGGTGAAACCTTGTCTCTACTAAAAACACAAAAATTAGCTGGGCATGGTGGCG GGCGCCTGTAATCCCAGCTACTTGGGAGGCTGAGACACGAGAATTGCTTCAACCTGGGAGGCAGAGGTTG AAAACAAGCAAACAGTGTCATGCTGCCCTCTCCCTCAGCTGAAATGCTTCAAAGGCTCCCTGGTTCCAGC CAGACCAGGTAATCCAGCTGCCACACCCAACCTGCAAAACACTCCTCCCTACCCGCCTTTCTAGTTCACC TCCTGCCACTACTGCCTTGCCAGCTCTGCGCCAGTCACACTGGCCTTTTTGCCGTTCCTCTGTGCTGAGC ${\tt TTGTTCTCATCTTGGGGACTTGGAGTAAGCCTCTCCTTCAGTCTGAAAGGCTCTTTCCTTAGATCTTGCA}$ TGGCTGGCTCCTTCTCATCATTCAGTCCCAGGTTAAATGTCACATGGCCAGAGACAACCCAATCTAAAGG AGCCACACCCCATCTCTACTGGCCCTGTTTTAATGATCTACGTAAGTCTTATTACAATCTGATATTT TATTATTATTATCTGATTAATTATCTGGTTTACTACTTTGTCTGCCCTTATGAGAGCGAAGGT CTTCTCCATCCACAGAATACACCCAGCACTTAGGACAGTGATTGGCACAGAGAAGGTACTCAATTAAT $\tt ATGCGATGATTGCATAATGAGTGAGGGCTGTACAGGATTTCAGGAGGGTGGTTGTTGAGAGGCTTCT$ CTAAGGTGGAGAGTAGCTCTACAGCTCCATGGGACATGCCAACCACCTATGCTAATCCTGTGCTCATCAG GCAAGTTTCTTTTGGAAAGCTTTGTTGGCTGAATGAATTTGCCCCTTTATTTTTATTTTTTTAAATCAG TTTTTAAAATTTTGTGAGTGCATGAGGTTTTTAAATATAGGCATGCAATGTCCAATAAGCACATCATGGA GAACGGGGTTTCCATCCCTCAAGCATTTATCCTTTGAGTTACAAATAATCCAATTACACTCCTTAAGTT ATTTAAAAATATTAATTAAATTATCGACTATAGTCACCCTACTGTGCTATCAAATAGTAGGTCTTA TTCATTCTATTTTTTTTTGTACCCATTGAATTTGCCCTTCAAGAGTAAACAATGCCATCACTGTACATTAC TACACTAATGGTCAATTTATACATTAGTCAGTGGCTTAAGAATCTGGGTGGTTTGAGTCTGTTGCCCTAA ACCTCCCCAATTTATTCACCCATCTCCACTCCATGCCTCCTCTCATGGCCCAAGAGAACCCTAGTATTT CTGGATGAATGGGTAATATCGGGTTTCCAACCCCACAATGCTAGGGACTGGGGCTGTGGGGGGTGGTGACT GCACCTTGCTGGCCTCACACTGCAGAGAGCCCACTTGGATCACATCATCAAAAACATTAAACCAAAG GTGAATGAACATCTTGCAAACAATGACCACCCTGTGGTTCTCACACTGCTACGATGCATACACTACCTTC AGCTCATGGATCAGACTTCTGGTTTGGTAGAGGCTGAAGCGCTCCTGGCCCTTCACTGCAGATAGCAGGT GGCTGGTGTCAGTGAGGAAGCGAAACAAGTTCTCCACAGAAGTAGTGAAATCTTGCCACTGCCTCACCAG CCCATCAACGTCACCCTTCCTCTGCCGAACACCCTGGACAGCATTCTGCCACCGATCCGTCAGCTTTGAG AATTCTGTAATAAATTCTGGTCTGGGGAAAAACAAATGGTTATAGAATCCAGACATCGACATGTAGAAAA AATAACTATCAGTGGGTAATAGCAGCTCAGATTCAGTTTTTATAAGTACAATTTACATGAAAAAAATCCC AACTTCTAAACACCTGAGTGCTATTCAATTTAAACATGATTAAGGCTTTGGGAAGGGCAGCATGCAGACT CTGAAGCTGTTTTAATATACATTAGGCCAAACGTGGAAAGGAAAACTAGAAACTGGATCAAAGGGAAACA GATGAACAGGCAGGTACTTTGTAACACTATGGATTACTTGAGTGTACTTTACATAATTTTAGCAATAAAG CCTCTTGTTTATTATGGGAAAGTCATGTTTTTCTGTACAGATCAAATTAGAAATTAGCTTATCATCCTGGA ACTGGCTTGCATTTACTGCTTCAGAGCTAGGGAGAAAAGGGCTTTACATTTCTTAGTTATGCTGAAAGAA GATTCAGAGGTGTATGGGTGGTGATGTGGAAGAAAATCATACCCATTAGGACATTTAGAGAAGTATTTA GACTGGCCAAAGGTGCTCTGTTCAGCCTGATTGGCACTGCCCAGTGACCCTAAGCCCACATATGTAGCAT TTAGAAATTATTTTTAAGTCGCAAAACATCATGAGGATGATGGTAGAAGAAGAACAGTACAGAAGAAT CATTTGGGGGCACAAACTTAGTTAACTATACTTGAGAAGTGGGCATTTTCCAAAGCTTCTGGGCTGCTAA CCCCATCCACCTACCATACGGAAAAGGTGTCTGTCACAGATGTTTTTATGGTCACCCAGCAAGATCTAGT TCAAGGTTCACATGGTGGAAAGCCTGCCCTGACTGAATGCATTACCTTCCATCCGCCCACAACCTTCATG AGGCCCAGACAGCTCACCTGTTCTCTATTTCTGTTGTGTCCAGGAGTTGTAAGGACTGGGTGACATAGGA ATCAGCAATTGTCTGGTTTATAGAAACTTCAGCTTCTAACATCTGTATATGAGTCCAAGCAGAAAATATC AGCTAGTAAAATTCATTTTATGAATCTCGGAACCTACATTTCCTATTAAAATCTAAGCTTACAAAGGATA TGAGGGATAATTAATTTCATATTATTTGAACCTACTGCAAAAAATGTTCAACTATCATATCAACATCAC CTACGAATATATTCTTAAAAGCAAACAGGTCTAATAATAATTACATCTAATACCCATTTGTTGGGCATTT TTTTTGGCAGGGGTGATTTCATTTTAATTGGATGATCTTAATGTAGCAATGTAGACTTCAATCAGTTACA TTAAAAAGTTGCAGTGAAGTAATTCTGCACACTTTTGAAATGTGTCCTTTGTAATCCCAGCACTTTGGGA GGCCGAGGCAGGCGGATCACTTGAGGTCAGAAGTTCGAGACCAGCCTGGCCAACATGGTGAACCCCATCT CTACTAAAAATACAAAAATTAGCCAGGTGCAGTGGCACATGCCTATAGTCCCAGCTACTCGGAAGGGTAA GGCACGAGAATTGCTTGAGCCTGGGGGGTGGAAGTTTCAGTGAGCCGAGATTGCGCCACTGCACTCCAGC ATTTTCAAATACATGTCAGCATAAGCACTGAGGAAACTCCTGTGAAATTATTAACGCTACAGTTATAATT ATACCAGGTGCTTTAATACTATGGAGAATTATTGAGTGAAAATACAAACATGAGTCGAAGTATTTTATTA TACTCTTGATAGAATGGTATAATGTTTGCATTTTGTGGAAGCAAAGTTGTACTAGAAGCTTCCATGTACT GCAGAAAATCTAGGAGTCCTCTCCCTAATAAAATAGAGCAGTAAATGTTGAAATTTATGAAACGTACAAG AATTTTACAAATGACCAATTGACAACTGAATTTGCTTAAAGGTATACATTCTGTGTTTTAGGGACTGATAG GTACACTCCCTGTGTTTTATTTAAAGCTATCTTTCCCTGACTCCTGCCCCAGATGAGCGGTTCAAGGGTG ${\tt GCAGAGACACAGGTTTACCTTATAGGTTTTCTGCTGCTCCAGGAGGCTCAGGAAGGCTGTTAGCCACATC}$ CACTTTGAGTGCTTCTTCTTCTCCCAAAAGTTGGATCCACTTTTCACAGCAATAAAGAAACTTTTCA TTCAATCCAATTCCCTGAAGCTCACTACAAAGGTTTAAAACAAAACACACCCATGTTAACAATGCCATTC CCGAGCTGAAGCCGTTAATTTACCTTAATTGAAACAACGACAGAGAAGGGATGTTCTAACCTGCAGCGC TCCAGTGCCGTGGCCGGATCCATTGCCGGTTCATATTTTGTAACGTCTTCACAGCTACGTCAC TAAGTGGGAGCTTGAGGCTCACTTCATTCAAATGTTCAATATCAGGTGATTGGGCTGTCAGTGCCAGCAC ATGATTCTATTTTTAAAAAATTGAAGTACAGGTTTTTGGATGCCAATAAGATATCTAGATGACAAAAAAC CCTCCTTACCTCAAAGATAAAGGAAAACTGGGGCCTGAACAGGCAAATGACTTGCCCACAGTCAAACAGC TTGCTAATGTTAGAGTGGGACCTGAATTCAGCTATCTCAATGCTGTGCCTTCTAGAATACCAACCTGCAA CACGGCCAGCACCCAAACAGCCCAGGAAATAGAAAGTTATCTCAGATTTTGTCACCGAAGAATACAGAAA ATAGGCTTTTTTTTTTTTTTTTCGGAATGGAGTCTCATTCTGTCGCCCAGGCTGGACTGCAGTATCA TGATCTCGGCTCACTGCAACCTCCGCCTCCTGGGTTCAAACGATTCTCCTGCTTCAGCCTCCCAAGTAGG TGGAATTACAAGTGCCTGCCACCACCTGGCTAATTTTTGTATTTTTAGTTTCACCATGTTGGCCAGCT GGTCTAAAACTCTGACCTTGGATGATCCACCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAG CCACTGCACCCAGCCTAACATGCTTTTTAAAAAAAGGACCAATTCTGGGCTTTTAAGTCCCATTTAGTCTG CCAATAACCTGGCCTTCAACAAACAGGTCAAGCACAGAGTGATGAAAATTTGATTCTTAAAATAACTCTA GCAGAGCAAGGGACTTAAACACCCATATTTTGATAGAACATGACATTGCAAGAAAGCAAACTTATCAAAA TTTCATTTTTAAAAAGATATTCCAGCGACAGCTTCTAAGCTGACAAGCAAACATCCTTAACAATATTGAA GTTACCACTACAGAACTCTGCTGTAATATTCTAGGTCAGGATAAGCAAACTTTTTCTGTAAAAGGGCAGA TCATAAATATTTTAGGCATTTGTGGGCCATATGGTCTCTGTAGCAACTAGTCAACTCTGCCCTTGTAGCG AAATCAGTGATGGACAGTGCACCACAGTTTGTTGACTGCTGATCTAAGTTATGAATATTGATTCCTAGGA GAGTTACAAGACCAGATCTAATTCTTTCAGTCATTTATGTTTACTAAACTAAACTTACGAAGGTAAAGAA AAATGCATAATAGAATTTTTTTTTATATTAAACTAACCAGAAAAATTCAATTAATCACAACAGCCAATTTC TAGATTATTCAGTTCACTGACGGTAATTATGAAAAAACATCTACTACAAATTACTCTGACGTATTACTA AATGACTGTGCTCAAGGGTGAGTTAGGCCAGGCGCAGTGGCTCAGGCCTGTAATCCCAGCACTTTGGGAG GCCGAGGCAGGCGGATCACCTGACGTCAAGAGTTCAAGACCAGCTTGGCCAATATGGTAAAACTTCATCT CTACTAAAAAATACAAAAATTAGCCGGACATGGTGGCACATGTCTGTAGTCCCAGCTACTTGGGAGGCTG AGGCAGGAGAATGGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAGCCGAGATCGTGCCACTGCACTCCAG AAGTTCACAGTAATCAGCTTATTTTTTTTAACCTTATGGTGAGTCTAAGCCCTTAGAAAAGACAAATATT GGCAATACCAGGAATGAGTCAGGATTTTCTTTTTCCTGTTGGTGAAGTCTATCCAAATTCTCTTCAT GCATAATAAGACCTTTTAAAGATTCCAGCCGGACTCCAAAATCCTTAAACTGTGAGAGAACAAACTAGAA CAAGAGAAATTTTCATTAGAAACTATTTTCATGTACATATAAAACAGAATTAAACACAGGCTTGGGAGCT ${\tt GCTAAAAATTCAAGATGTTTTTGGCTAGGCACGGTGGCTCATGGCTGTAATCCCAGCACTTTGGGAGGCC}$ GAGGTGGGAAGATTGCTTGAGCCCAGGAGTTCAAGACCAGCCTGAGCAACATAGGCAGACTCCATCTCTG CAAAAATTAAAAAATTAGCTGGGCATAGTGGTGTGAGCCTGTGGTCCCAGCTTTTTGGGAGGCTGAGGCA GGAGGATCAACTGAACCTGGGAGGTCAAGGCTGCAGTAAGCTGTAATTATGCCACTGCACGCCAGCCTGG AAAAAAGTAAATTCAAGTTGTTTTCAACACCCAGAAGTTCACTATTATCTCAAGAATCATAGATAAATAT TCAGAAGCCCCCTGATTTTTCACTCGTGCCTTTGAGCCTTCCCAAATGGACAGATCACCCGCCTGAGGAG GTTTTCCTGCTGGTACTGAGATGTGATACTGCAACTCCATGGCCTTCTGTGTAGCTTGTTGACAGCTCCT GCACTAAAGGCTTTATAAAAAGTGAATGAAGGCTGAGAGCAGTGGCTCATGCTTGTAATCCCAGCACTTT GGGAGGCCAAGGTGGGTAGATCACTTGAGGCCAGGAGTTCAAGACCAGCCTGGCCAATGTGGCGAAACCC CATCTCTACTAATTATACAAAAATTAGCCGGCCAGACACAGTGGCTCACGTCTGTAATCCCAGCATTTTG GGAGGCCAAGGCAGGTCGACGAGGTCAGGAGATTGAGACCATCCTGGCTAACATGGTGAAACCCTGT CTGAGGCAGGAGAATGGCATAAACCCAGGAGGCGGAGCTTGCAGTGAGCTGAGATCACACCACTGTACTC AGCAAGCCAGGCGTGGTGGTGGTGCCTGTAGTCCCAGCTATCCGGGAGGCTGAGGCAGGAGAATCGCTT GAACCCGGGAGGTGGAGGTTGCAGTGAGCCAAGATTATGCCACTGCACTCTAGCCTGGGTGTCAGGTCAA

GAGTCTGTCTCAAAATAAAAAAAGTGAATGAAGACACGAAGATATGACAAATCATCATGCTTTAAGCAG $\tt CTACTTCTATGGCTCAATTACTTGACTCAGAAATCCAAATAACTGTGAGATCTGAACAATGTATGCAATA$ TAATACATATGACTTCTAGAACTAACATCTTCAATAAGGAAGAAATGATTGCTTAAGATCTGCCCATG TGATTGAAGCTAGAATCGTATACATTTGGGAGCAGCTTCAGTCTGTAATTTTGCTAAGGAGCAGCCCGTA AAGCACTACTGCTTCAAAGGATACAAGGGATTGAGGATGGAATGCAAATGTCTAAGACTAAAACTTGAAT GGAAAGAAAGATGAACCTCAAATTCATTTGCTTTCACAAGCAGCATCTTTTCCAAATAAGCAGCCCTCT GGAGAGAGTGCAGGGGGCCCGGGAGGAGCATGTGGGTGCTGGACTCTGCGGGTTGTGGGAGTCGATCCAG GACACTGGAATTTTGGAGAAAGGCTTCTTTTGTTTTCTGCACATCATGCTGCAGCTCCTGCAGAAGAAAA AGGGATGGCAAACACCTCTTCCTCCTTTCAAACCACAATTCCCTACCCGCTGCTGCTCCATCAAAATCTA GGAGAATATTTGCCCTGAAAACGTAGGCATGATCTTTTGTTATTATTTTTTAAATAGCTGAAAAGGCT GGGCTTTCTTGAAATGATGTATATCACTGGCGCTTTTCCGAAATTTGTCAGTTCAAAACTAAAAGTGACC ACTGACTAATAGAGTCGAGGCTTCTAGTGTATAGAAACTGGAGACAACCTGAGTACTCATGTACTTTATA TTTCAGTTGTCAAACAGTTTAGGTATCTGCTTTCATGCTGTTTCAAGAATCAATGCAACTCTGACCCCTG CCTGAGACTTTCTGATATAAATGGATTCACGTGCAGAAACTATAGAATTTTATTAATCAGGCTGATTTTA TTAATCAGATGTACAGAGCATTATCTGTTGGATTCTCACCTAATTAAATTGGTTGCCACGTTTTGATTTG ACCTACAGTAGCAGAAGATACAAAATGCATCTGTTCACTCAGTTCAGAACTAAAGAGTATTCACTTTCTG AGCGTTCATTAACAATAATAGAAAAAACACCATAGAGGAAACTAAGCAAGTCTTTAATGTAGTCTGAAAT TTACTATACCCACAGAAAAGGCCTAGCAACATGGCACCAAGTCCATGATTACTGCTAAAACAAGAGATAC AACATGTATTATTCTTACAGGGTCACACTCAGTTGAGACACTTGCTTTTACTTCAGATTTCATATGAAGC TTTTGCCTTAGAGATGTAACACTAGAGAGAAAGCACAGACTTGGAACGAGGTGATATCGAGTCCCCCTGA TCCAGCTATTTGCTGCCTAGACGTCACCTCTGAGCCACCACCTGGTCCTCCCAGCCTTGCCTATGTCCTA GTCCCTTACCCCATCTGTTGGGCTGACTTGGCCTTGGTTTTCCAAATGGGCTTTGTACCCACCTTTATGT $\tt CCTGCAGGGCTGGGGGCAGGATCTCTGCCAGGTTGTTTCCAGACATGCTGATGTTTGCGAGCTGTTGAAA$ $\tt CTTTGCTTCCTGCTTCAGCCTTGCGGCAGCTTCACCATGAGCATTGCTATAGGCCTTCCAGAGCTGG$ AGCAGACTCTGGGCCTTCTGCAACTGGTCTGCAATGGCTTGGTTCACCTGAGTCCACCTGTCAGTGCAAC GCAAATAACATAACCTCATTCTCTCTTTCTCTTGTAGCGAAAGTACAATGCACACACTCTACTGGTAA GTTACTAGCAGATGGATCATTAAGAAGACACTGTTAAATTGTTTTAAAATTAGTGGCATCACCATTATA GAAACCATTATATAAAAATAAATCCAAATTAGGCTATTTACTTGACTTTATAATATTGCACAAAAACTAC AAAATGTATGATTGCCAACAAATACCTATGATGTTATGAATGTTTCACTCTCTTTTTTTAAGAGAGGGGA TGGTCTCAAACTCTGCAGCTCAAGTAATCCTCCAACCTCAAGCAATCCTCCTGCCTCAGCCTCCCAAAGT GTTGGGATTATAGGTGTGAGCCATGGTGCGCCCCGCCTATGAATGTCTCTTTGGCAAAGATGGAGAAAAC ACTGAACTGTATGCCTGATAAAATGACTCCACATGAAGAGGCTCCCAGTTTATAGAGATATGCTATCTTT AAACAGGTTTTAACTTTGTATTTATCAAATAAAATTTATTATCTGTTTACACAAATGTTCCTTACATA GAAGTGGAAATAAAGGAAATTGTTTTATTATTCCATATACAGACTCTAGTATCTTGCCTTTCTTCCCTAC TTTTTTTTTTTTTCTGAAACAGGGTCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTGGTGCAATCTCAGCT TGGTCTTGAACTCCTGGACTCAAGTGATCTACCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATG AGCCACTATGCCTGGCCCATTTAACTTTTAAAAAATATTTTCCCCACGTTAGTAATAAAAGAAAATAAGT TAAATTCCTTAGTTTAATTCCTGTTTAGTATGGATAGTTAAGATATTTGTAATTTTTGCTATTATGATAA TGCTCAGATACAGTTTTATTCAAAAGGCTTTTTTTCTGTATTTCAAGATATTAGTCTTAGACTAGATTTC TGGGAGAATTACAGAGTCAAAGAATATAAAGATGTAAATATTTGTAAGGCTTTGGGAATAAATGGTCAAT CTCCTTTCTGAAAGCATTATATTTACATTCTAACATGAAATACATGAGAATGTTTGCTCCACAATATCCT CAACAATATCCTCGACCCTGCTGATTAAAGAATCAAAGGTGGAAAATAGCACACTGCTTTACTTTTATGC ATTTCAAAAATCTTATCAGAACTGTCTTTTAAAATAAGATTTTCCCTAATTATAAATACAACATATATTC TCCATGAGGAAGTTAAAAAATGCTTGACATCTCATTTATCTAGAGGTAACTACTATTAGCATTTTAGTGT TCTTCTCTCTCAGTCTTTTTTGTTATGCATGTTTTTCAACATGCCTTCCAACATATTCTTGTGCCAACAAGT GAATGTGTACGTGCAGCGTAACAACTGAGTTCCTTTACCAACAGACTGCCCTGCCATACGTTTTGACGGT AATAAAGACTGGATCAAGAGCTAAGGGCACCACTGCAGGGTATATAATTTGGGGTCCCTTGTTCATTACT CATAACTCTTCATCCCTATCTCTAATCAATTGGTTGGAGGCCAACTTTTATATCCCACTCATCAAAATAA AAGCCCTGCAATTAACTAGGGCCACACTCCTTAAAGGGAGCTTTCATATCCCACCATAAGTAGTTCATCA AAGAATTCCTTCCAAACCCACAAATGCCCTCCGCAACAGATACTCTAACATCCCCTTTCTTCCACCTTAT AATGTTTCCAGTGATGTTTGAACACCCCCTGCAGGATGCCCATCTGGCCCACTCCTTTGTCTGTTTCTGC GTTGTTATTAGGCCATTCTAGACTAATTATACCAAACACTTGTACAAGGGATGTCACAGCCCTCATGAC ATAGAATCTTACATAGACTAGATTCATCAAAGCAGAAGAGACCAGAACAGTAGGAAACCAGTCATCTCAG AGGAGGAAGAACTTTACAATGCCTATGCCCCTCATTCTCACAAGTCATTAAGATAAAGATATCTAT CATTCAAATTATATCTGAAAGCATACCTTTTATGAGTATTTTGGCATTTCTCTTCGATTATTTCAGCAAC AGAGGGGCAGAGACCTTTGAGTTTGCCGATAACCTCCTGGAGTTTCTCCCCAACTCCCTTCACTGCTCTCA GCTTCATCTTGCAGAGACTAAGAGACACAAACAAGAAATTTAAGTTTCAGAATGGCCTGGCTACTTCCAA AGAAGGTGGCAGCTTCTCAACACTTGCTACTATGTAGCAATAACACTCAAATCTTACAGCTCTGATAAAC TATTAGGAATGTGAAGAAAACAATGGAGAAGGCATTCTTTATTTGAGGCTGAACTTTTAAGTACTAAGTA GAAATAATATGGACATGGAAAATAAAGGAAGATTCAACATTTTCAACTCAAAATTCAAACATTTTACAAT GTTTTACTGATTTGGCTCATGTGACTTATTTTGGAATTTCCAGTTATTCTTTTGAAACTGCTATTTAACA TGCTTTGTGCTTCTCTGTGGGAGGGCACAACCAGTTATGCCCGTTACTGTGCTTCCTCCCATTTGTAA TTTCCTGCCAATAATGCACCATGCCAAGCTCTGGTTAATTTACCTGAAGGTTCTCCACCTGGCATCTCAA GGTCTCCAATGATAACACCACAGGCTTGCTGTGTTCCATGCAGTACCAGAATCGGATTGTCATCATATTC TGACCTAGACAAAAGTGGAAACGTACTGATTTAGAAAATCACTGAGAAGACATGCTCTCCAACAGATCT ACCATTGTGTCCAATTTAGGCATTTCAATTTGAGAGTATTGAAGGATCACCAGTGATTAACTGAAGGTGG AAAGATCAGAAGGATCAGCACTGAAGGAGTTCAGACTAGGAAGAACACCCCAGGGAAAGAACACTGGGT ${\tt GAGTATTAGAATTTGTGAGTGCAAGGTTCAGTTATATTCTATTAGCTTTCTGACCTTGGGCAACTTATTG}$ GACCCTAGAGTCAGTTTCCTCATCCACAAAACAGAGATAATAATTGAAAACACAAATAAAATAGTGTCTG TGAAAATGCTCTGACAACAGCACAACATTATAAATGTAAGATGTTACCTGGCACTTAAGTCTGATTATTA AAGCAATGGTGAATGTATTTTGTCCACTGGTATGTTCTGATAATGATGAAAAAAGTCCAAGCATTCTGTT GCATATCCAAAATGATCTCAGATACAATCAAGAGTATGTAAAGAAACTTACAAATCAATATTAAAGACA GATAAACTAACTAAAAACTGGGCAAAGGAAGTGACTAAACATTTCCCCCAAAGAACATATATAATGGTCAA TAAACATATGAAAAGACACTGAACATATACAGTCATTAAGGAAACCTAAATCAAAACCACAATGAGATAT TATTTCACATCCACTTTGATGGCCATAATCAAAAAGTCAGATAATAATGTGTTGGTGACGATGTGGAAAA ACTGGAATCCTCATACATTGCTGGTGGGAATGTAAAATGGTACAGTCACTGTGGAAAACAGCTAGATAGT TCCTCAAAAAATTAAATAGAGTTGCCATATGACCTAACAATTGTACTCTTATACACACAAGAGAATTAAA AGCGTATGTTCACATAAAAACCTGACACAAATGTTCATAGCAGCACGATTCATGAGAGCCTAAAAATGGA AACAACCCACATGTTCATCAACTGATGGAGAGGTAAACTAAATATGGTATATCCATACAATGGAATATTA GCCATAAAAATAAATGAAGTACTGTAAATACTACAACACCGATGATCTTGAAAACATTATGCTTAGTGAA GGAAGCCAGACCAAAAGGCTATATAGCATATGATTCTATTTATAAAAACGTCCAGAATAGGTAAATCC ATAAGAAGGTAGACTAGTGGCTGCCAGGGACTGGAGAAGGGGAAAAGTGGGGAGTGACTGCCAATGGGTA $\tt TGGAGGTTTCTTTTTGAGGTAATGAAAATGTTCTGTAATGAGATAGTGGTGATGGCTGTGTATCTCTGTT$ AATATACTAAACATCACTGAACTATACCTTAGAAGGTGAATTTTATGGTATGTGAATTATATCTCAATTT TTAAAAAGGATCTGGGTTGAAATGGAATGTGATCACTATAGTGGCTCCACAGGCCATCTTTATGGGTAGT GTGATGTGAGTTTTGGGTACAATCACACAGCTCTGCACTCAGACCCTGTTTTCTGTTTAATAACTACAAG GAATGCTGGCACATCCACAGTGACAGGGAGGCTCCTCAATCTCTGCCCCAAACAGGGCTGGATAAAAAAC ${\tt CAAAGTGGGACGCTAAAATGTGAGTCTCATGTTGGCAACTATGTGGACTGAATGTCTTTACAAGGGCAGG}$ ATGGCTAAGGAAAGAACCAAGTTATTTAGTTAAGAAAATAAAGAAGGCGGCCAGGTGTGGTGGCTCAC GCCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGTTGGATCACCTAAGGTCAGGAGTTCAAGACCAGCC TGGTCAACATGGTGAAACCCTGTCTCTACTAATAATACAAAAATTAGCCGGGAGTGGTGGCACACGCCTG TAATCCCAGCTACTAGGGAGGCTGAGGCAGGAGATCTTTTGAACCTGGAAGGTGGAAGTTGCAGTGAGC AAAGAAAAAGAAATAAAGAAGAAAGCCAAGGAAGGAATTCCTCATCGATGTACATTTTTGCTAGAAAT GATCTCACATCTATCTGGGTGGCAGGGATAATTCTGGCACAAAGTACCGCATCATCCCAGAGCCCATATA TACATGTCAACACAAGAACTGCCATGGCTCATGTTGCACAAGGCCTTTGCAGCTTCCACAGATAAAGGTG GTGGAACTTCTAGCACCTTAAAGGCCTTCTGGCCTTATAATAAAGCTTCATGGAAAAGACACAGTACATG AGGTTTGAGGGAAAGGATGAGAAAATCATCAAGTAAAATTCACTATACTAAAAACAAGCGGGAGGAATAT TTTCAAAATGTTCCAACTGGGGTCATCAGCAGGGCAGCATTTATTGAGCATTGTATAGGCATCAGTATTA AGATAGAATAAATGACTAGGTGTTATCATCCCCATTTTATAGACCAGAAAATCGAGGCTTAGAGAGGTT AAGTAACCTGACCGAAGATACAGATCAAAAATGGTGCCGCCAGGATCCTTATTTAGGCAGAAACTGCAAA GCCCTTGCTCTTAAACACTAGGTTGTATTGACTCTTGTTTACCCCTGGGCTCAAGTAATCCTCCCATCTC GATGGGATCTCACTCTGTTGCACAGGCTGTTCTTGAACTCCTGGCCTCAAGCGATCCTCCTACCTCAGCC ACCCAAAGTGCTGACATTACAGGTTTGAGCCACTGGGCCAGGCCTACATTGACTCTTGACAGCTTATAGA ATACGATTCATCTATTTAAAATGTGTAATCTCCATAATCAATTTTAGAACATTTTCATGACTCTGAAAAG AAACTGCATAACTATTAGCAGTCACTCCTCGTTCTCCCCAGCCACTAATCTGCCTTCTGTCTTTATAGAA TTGTCCATTCTGGTTATTCCACGTAAACAGAATCAAACAATATGTGACCTTTTGTGACTGGCGTCTTTCA TTTTGTATGGATAGACCACGTTTTCTTTATACATTCATTAGTAGATGGACAGTTGGGTTGTTTACACTTT CTGGCTATCATGAATCATGCTATGAATATTCACGTATAAGTTTTTTGGCGTGGACACGTTTTCATTTCTCT TGGGCTATCTATGGAGGAGTAGAACTGCTAAGTTGCATGGTAACTTTATGTTTAACCATTTGAGGAACTG CCAGACTCTTTTCCAGCTCCATGGAACCCGTCCAGCAGTTTGTGAGGGTTACGTCTCCACATCCACATTA TGATTTTCATTTCCTTGATGGTTAATGACATGGAATATCTTTTCAATGCACTTTTCGGCCATTTGTATTG $\tt CTGTGTTGCCCAGGCTGGAGTGCAGTGGCATAGTCTTGCCTTACTGCTCCTTCCACCTCCCAGGCTCAGG$ CTATTTTTGGTAGAGATAGGGTTTTGCCATGTTGGCCAGGCTGGTCTTAAACTGCTGAATTCAAGCGATC $\tt TGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGAGCCTGGCTTGTATCCATTTT$ $\tt TTCCATTTGGTCATTTTTCCTTTTATCAAGTTGTGATAAATCTTCATATATTCTAGGTGTAAGTCCC$ TTATCAAATATGATTTATAAATACTTTTTTTAACAATTTGTGGTTTGCCTTTACTTTTTTGATGCTGT ATTTTGGTGTCATTCTAGGTAACCCCTGCCTAATCCATGAAGTCATGAAGATTTACACCTGTGTTTTCTT TATGTTGCCCAGGCTGGTCTTGAATTCCTTGCCTCAAATGATCTCCCACCTCAGTCTCCCAAAGTGTTGG GATTACAGGCATAAGCCACCATGTCTGGCCTGCATTTATGTCTTTGATCTATTTTAATTTTTGTATATTG

 ${\tt TATGAATGCAGAGGTCTAACTTCATTATTTTACATGTGGATACATGGTTGTCCCAGCACCATTTTTCAAG}$ AAAGTGTTTTCCCTCATTAAATTGTCTGAGGATCCTTGTTGAAAATCAATTGACTACAAATGTGAGGGCT TATTTCTGGACTCTCAATTCCATTCCAAGTATATATATGTCTATCCTTATGACAGTACTATCTGCATGTT GGCAGTGAGCACAGTACCTCACACAATGTATGCTTAACAAATGACTGAATAAGCTCATCTCTATTTTTCT GCTACATTCCTGGGGGAATGAGGACTGAGGAATGAGGCTGAGTGTTGCCTATGGATTTCATGCAGGTTAT TCCCTATTCCCTCTTGGTACAAATGGTTGAAAGTAGATTTTAGTAGGTGACAACCCACAATGAAGGTTCT GTATAATTGGTTAGTATTTTTAGTTCTCTTCTCTTGTGGGAAAATGTCAAGGTTGCAATGTCTAGAG ATGCCTGAGCTCGCTCTTTTTGGTGCTCTCCTCCTGGAAGGGGTAAAATGCTGACATTGACATGCCTTT TCCAAACTTTAGAGTCCTCCTGGAGCTGACTATGCTCCTAGCTCATAGAGGCTACATGATACAGGATCAC TTCCTCCCTGAGGCATCTCCCTGTACATGGAGACACTGCTTCATCACTGTTTCTGTATATCTTGCCAGGA ACAAAGATAACCAAGTGGATTTGCAGCCTGTCAATGACGTTGGAATTGGTGGCTTTGCCTCTAATTATTG AGTGCATAAAATGGGACTTGAAATGCTTCTAATTTTACTTCAATTTTTCTCAGCAACTTTTCAGTGTTTTGG TATAGAGAGTCTCCATGAGTAAAGGACGAAAACAACTACAACGACAAATAAGGTAAAAGAATATGTGAAG CAATTCGGGATGCTGTATCTTCTAACAATGGCACTGCCCCACTCTCCAAAGTCAGATAACTTTGTTTCAA CTCATCTAGTGCTTTGGATTTAATTGCAAGTTGATTTTCTATATCCTGGAAGAGTAAGAGGAAAAGGTTT TCAATGCACAATATTACAAAACAATTAATAAGGTGTCAGAGACAGGAGTTCACTCTTTTCAAGTAAAAAT GTCATTAGATTATAATTAAATAGCATTACATCAAAGAAATTTAAATCATAATACTCTTAGTTCAATTA CATATGACACACTCTGTATTTTAGGAGAATCTAGGCAACACGTCTGAACCATCATGGCAGAGCAGAAAG GATGCTGGTCCGAGATCTGGTCCCCATTCCACGTCTGCCCTGCACTGGCTGTTTGACCAGGCATAAGTCA TCGAACCTTTCAGTCTCCATTTTCTCATTTGGAAAAAGTGATGATACCCACAGCATGTGTGCCAAGCTAA GAACTCAAATAAAATCACGAGCAAGAAGGTGCCTTTAAACCATATAGCATCATATAAATGACAGACGATA TAACTGTTGGTAGTTCAGTAATAACTTTAATCATTTTCTACCTCTTAGTTTATTAATTCACTCATAAGAG GCACCCTGACCTGGTCTACTCTTTATAGATACATTTTTAAAAACCTACAGGATCCCTCTACTACAAAGGA CACCATGGGGCCAGCAGTCTGAAAACAGAGATGAATGAGGCCAGCAGCAATGGTGCCACTCTACTCAGAG GAAGGACGGTCGGAGCTGCTTATTTGTCCTTCTCAGGATTGCAGTTGAAATCCAACTTGGAAAAAGTTTA AACTTTTTAAAAATTATTAAAGCATTACATGCTCATTACAAAGAAACTGGAAAACACAAGAGATCTTTGG CATTCAGAGGGATTCATTTTGAATTCCCCTCAAGTCTCCCAATTCACAAATTTGGGACGCGCTTCTGCAT ACTTTCTTTAGCATTACATTCCCATCCAGATGCATGTTTCTGAATGCATGGCCTCAAGATAACGACCCT ATCCTTTGTAAGAATCACTGCATGGTCCATAAGGAAAGAGAAACATGAGTGCCTCGTGGGCATGGGGTAG $\tt CTGAGCAGGTGGCTTGTACCCTGGGAGGGACAAGCTCCCTTGTGCTAGCCTCACAGAGGAGCACTGAAAT$ CCAGTCCCGCAAAACTGCCAGATTACCACGTGAGGAGCCCTCAGGTCACTCTTGGAAGGTGGAAATCACA AACTCTAAACCAATGAATGTCAGGGGTCTTCTGGACTGGAAAGTAGAAAAAGGGAAAAAAATCTGTTCCA TAAGAAACTGATAGCTAGGTTTGGGAGTAAGAACGGATGATGAGAGAATGGAGCTGGAGGAATCTTCCAC TGTATGACCCTCTATGCTTTTAGAATTTAGAGCCACATGAATATATAGCGTATGAACAGAAAACCTCTCA CTGTCGTAACAATCCACCCATACTAACATGTGGGTGAATTTATGAAATATTATTCTTCTGGACTGGTTAC AAAGGCACCCAGGAAACAAAACGACTTCTCTGAAATAGCCTTTGCCAATGAGATTTAGTCAGCTGCTACC TATCATAGGTTTAACTTTTTCATCTGCAAAGTTATAAATGAAAACACTTTAATATTAAATCACTTTCCT ATAAGCTGTCATAATTCCCCTATAATGTAAAGAAAACTGGTAAGAAATGACTACAAAGCAGACAAAAGGA AGTAACAACACACACACACACACCCCTTCAAAAATGGCAGCATAAACAACAGCCATGCCGGGCACAG TGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGTGGATCACTTGAGCCCAGGAGTTTGA CACCAGCCTGGGAAACATGACAAAACTCTGCCGTTACAAAAAATACAAAAGTTAGCTGGGTGTGGTGGC TTTTTTTGAGAGAGAATCTTGCTCTGTCACCCATGCTGCAGTAGGCATGATCTCGGCTCACTGAAAACTC CGCCTCCGGGATTCAAGTCATTTTCCTGCCTCAGTCTCCCAAGTAGCTGAGGCTACAGGCATGTGCCACC ATGCCCAGCTAATTTTGAGCCACCGCGCCCAGAGTGGGAGGATCTCTTAAGCCTAGGAGCTCAAGGCTGA AAAAAAAAAAGAAAAGAAAAAAAAAAGCCATGGCAATAGCAGCACACGAACAACCACACGGTGGGGT TGCTCGTTTCTTTTGCTCTGCAGAATAATACGGATTTAGCCCAGTAGTCCTGTCATCTGACCTTGCTTCA ACTTCCAATTTGCTACACATAAATCAGGGTGGAATTAAAAATAATCTTTTGCTAATTATGGAGATTCAGT AGAATTTGCAAGTCCTATTTTTCCATTCTGTGAGAACCAGCATTAAATATTTTTAAAATATCTAAATTCC GGGATTAATAATCTCAACCTCCACACCCCACTCTATTCAACTATACAATTTTCCTTGATAATTATAATA TGTCAAACGTGGCCTTTTTCCAGTCATCAATGGCTTTTAGAAGCCCTTCGGAATATTTCAATCCTAATGT CTTCATGCTTCATCAACTCCAGTCCTTAACTTTTCTAGAGTAAAGCCACTTTAGCAAGCTTACCTGAACT TCTTTCTGTTTTTTTTAGAGATGGGGTCTTATCCAGGATGGAGTGCAGTGCATGATCATGGCTTA CTGCTTGAACCTTGAACTCCTGGCTCAAGTGATCCTCCTGCCTCAGCTCCCGAGTAGCTAGGATTACAGG TTTGAACTCCTGGCCTCAAGTGATCCTTCTGCCTTAGCCTCCCAAATTTCTGGGATTACAGGTGTGAGCA AACATTTATAGAAAAGCAGCCTTTTAGGTCTATTAATAGATATATTCAGGCAACTATTAAGCACCTATGA GTAGACGACAGACCCGTGGACAGATGAGCCCAGTACAGTCTCTGACACATGATGCTACATGGGGTGCTAG GGAAGCCTGTTTTATTTATTTGCTTCCATCTTGGCCTTGTTTATGGCCTTTTACAAAGAGGCATCCAAGC GTGTGTGGATGGTGGGGGGGGGGGGGGAGTAGAAATAATTCTGCAATCAGCTGCAAATGTAATGGCA TGTCTCAGTCAACACTAGTCATTTTTCTAATGAGCAGAGCAAATGTGAGAAATGGTTTTCTATTGGTAAA ATTAATGGATTATTATTGTTATTAGAGATGGGGTCTTGCTTTGTCACCCAGGCTGAACTACAGTGGCATG ATCATAGTTTACTGTCACCTTGAATTCCTGGGCTCAAAGGATATTCTTCCCTTAGCCTCTTGAGTAGCTG GGACTACAGGCATGCACCACCATGCCCGGCTAATTTTTAAATAGTTTTTTGTAGAGACGGGGTCTCACCG TCTTGCTCAGGCTGGTCTCGAGCTCCTGGACTCAAGCAATTCTCCCACCTCAGCCTCCCAAAGTGCTGGG ATTATACACATGAGCCACTGCGCCCGGCCTTAATGGCTTATTAAATAACATAATGAGTATTAGAAATGGG TTCTCACTAGTAAATTTCATGTACTCAAGATCCATGGATTGGCTAAACTACCGTAGATATAATTTCCACC CCTACTTGAACGGCTATAAGAACTGGGCATAGCCTGTTGCCTTCAACTAGTGCAATAATCCCTAAGGTAA GTCCTTATGTGGTTTTTGTATCCAGTTTAAACTCCAAGGATTCTGGTTGCCTAATGTTGGCCATAGAAAT ACAGATGGTGGCATTGTGTCTGGAATTTATTTTATTTACAGCTTGGTAGTGAGGTTGTGGGAAGAATAGC ${\tt ACTCACTTGACTTAGGTCTATTTGCAACTCTTTGTAGGTGAGGGACCAGAATGTCATTCTAAAACATGTG}$ ACACCTCCTGGGCTCTGGAAAGAACCACCTACTAGGGGACAGGCCAGCACCAGGCTGCGGAATGTAGGCT TCCAGTAAGGAAGCACATGACTCCAAGGTGGCTGTCAGAAGGCTAAAGTGGAGATGGCTCATTGGGAGGT GGGAACAGTATACGAGCAGGTGAAAAGGGCCGCTTACGGTGGTGCTGCTCACATTTATGTCCAGTGC TATCCCGTGACCTCCTCAGTAGAAATGGGGTCCGGCCAGACTTTCCAGTCCTGACAGTGACTATTGTAAG GCCGTCACGCAGGAAGTGCAGAAACAGCACAGCGTGTGCCGCCTGCCGTGATGGCGATGGCAGAGGTCCT CTGAATGGGCAGCCACAAGGGCAGTGCTAAAGCAGGATCAGTGTGCAAAGACTGAGTGATGCGGCAA ${\tt AGCATAGCTGAACCACGGACAACACCCTCAAGCCCAAATGTGATTCAGCAGAGGTTCCAAGGGACAAGTG}$ AACTTTTTAAAGCATAATACACAATAGGTAGAAGAAAATCATTTTCCTCGAAAAAACACAGAATGAAATG CTAAAAATAATGAAACCTTTAGAGTAATTTTGTAACATTAGGCAAAATGATTAAACAAATGGAAAATTGG AAAGCATTTAAATCAAAATTCCCTTTGAACATTTTTCCCCAAGAGTACTACTCAAACCTCTTAAGAGCAG CAATACTGTAACGGTGAAAGTACATTCTTCTGTTTATCATAAAAAACGGCACTTTGCAATTTTGTAAAAC ${\tt CCATGGGTCATTATCTAATTGACATAAGAAAATAAGTAAATAGAGGGGAGCTGGAAGAGAGTTTCCACAA}$ TGTTCCCCTCCTCACCTGACAGTCCAGGAGCAGCTTCTGCACTGAGATCACACTTTCAGGTTTTTGTAAA GTTTTCAGTCTCTTCTTGTGCTTCCAGCCAGTTGTTCAAGATCTGTATTTTATTTTCACTCTCAGTGA TACTTTCTAGAAGTTGTTCTAAATGTTGTATCTAAGTGAATGTAAAGATTACAAAAAATGTTAAAATGTA TGTTTTAAAAGGTAAATGCCATGACGTTATTTTTTAAAAAACAATTTTGCTTCTTTTCAAATTTCTAATA TTTCATGTAATAAGATGCTCTGATAACTTTTGAATAAAGATTCAAAAATCAGAAAACAGAGTTAAAGCTC $\tt CTCTTAGGAAAAAATATCATATTTAAGGTGAAAGCTAATCTGCTGAGAAAGGTAGCTGTTGTGGAGTTT$ CAGATGTATACAAAATAAAATGTTCCCAACATTCGATATTTTTTCATTGTGTCATCTATTAATATATGTA AAGTATAAGACAAATTTCTTTCCTCAGACTTTCTGCATTAGAGTTGCTTAAAATTTCTACCAATATCAAT GTCATGACATAATTTTTTTTTTTTTTTTTTGAGACGGAGTCTCGCTCTGTCACCCAGGCTGGAGTGCAA TGGTGCAATCTCGGCTCACTGCAACCTCCACCTCCCGGTTCAAGCAATCCTCCTGCCTCAGCCTCCCTA GTAGCAGGGATTACAGGCACGTGCCGCCATGCCCAGCTAATTTCTGTATTTTTAGTAGGTCAAGAAAACA CCTGACCTTGTGATCTGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATAAGCCACCACGCCCA GCCTGTCATGACATAATTTTAAAAGGCTGCCCGGCCAGGCGTGGTGGTCTTACCTGTAATCCCAGCATT TTGGGAGGCAGAGGTGGGTGTATCACTGGAGGTCAGGAGTTCGAGACCATCCTGACCAACATGGTGAAAC AGGCTGAGGCAGGAGATTGCATGAATCTGGGAGGTGGAAGTTGCAGTGAGCCGAGATCGCGCCACTGCA CATCAAATTAATACAGTATAATTCGATGAACTATTCCCCTAGAGTGAGAATTAAGGCATGGTACATTTTC ACAGCTGTAAACGATGCTGAATTGAACACTCTGTGCACATCATTTACTTTTTTGAAGGACTATCTACTTA ${\tt AATGTGTAAGAGGTGACTTGCTTGGTTAAGTGATAAGATTATTATTACGGTTCTTTACATTTTCCAAATG}$ CTGATTAATTTTTTTTCTAATTAAGTGCATTATGTTACACAGTGTTTATTTTGAGTATCTGCTAATGATA TCTTTCCATGTTTATTTGCTAACTATAATTTCCTCTTTTGTGAATTGTCTGTTCATGTCCTTTTGTCCATT CATGTACTTGTATCTTAATTGTGTAAATCCATTTGTATGCATTCTCTACACAGTAAACACACCAATTATC ATCATGATTATATGTAAAGTATTTTTTCAGGAATAAGTTTTCCGAATCTTTTCAAGAGTCATGGAGTGAA AAATCTACCAAAAAGCCAAGTGCATTTTTCTTTCTTTTTATAACCTTTTCAAAGCTGAAATAGCTTTGCC CCTTTTGAACATCTGCTTTCATAGAAAATGTAAAATCTCTGATCATTTAGGAGTCTGACATAATACTTGA CATGTTCCTAAATAAAATTCCTCATCTTCACTTGCCTAGCTCAATTTCCCACTAAGAAATCTCAAATATA AGAACTATTTTTATATTCTCTTATAGGTACCAATGGAGAATGCTAAAACATAGGATTTATAAAAGGGCTA TAGTTGAGATGATTATTAGGCTTAATAATCAGTCAACTAATTGAACGTCTTTTTTGATTTTTCAGAAAGT GTGTTTCATAAAGGTCAAACCACACACCACTGTGTGACGCAGGAACACCCTTTCTATTCAGCATTCCAT GTACACGGTGCCACTGGCGGTTCATCTCCCCCAGGTGCTCTGCAAACTCCGTTCTTTCATAGCGCTTGCT TTCTACATCACAGGTGCTTAGCTGAAGTAATGACTGGTTAACGAAGTCAACTATCCACTGTTTATAGTCC ATTTCCATTCTAAACTCCTAAAATAAGCAAAGTTAAACACCAAAGCAGTCATGAATGTTGGTCAGATCAA ATGGATTTCCCTTTATGTGCTCGAGGGGGCACCAAGCTCCCGTCCATTAATCAAGGGGCACCTGTCAGGA GTTCTGTTCTACCCTCCCCAACCTACACCAGGAGTTGGCTTTATTGGAGTAGGGATTCTTTTGGGGAATT CTGAACCCTGACCACGACCCAGGATATGACAAAGCTTCCTGGGGGAGGCTGCCTGTCAGCTGTGCTGGAA TTCTGGGCCATCCTGAGGGCTCACGGAAACAACCAGATGGGAAATAGGAAGTAAAGTCTCTTTCAGAAAA ${\tt CCCAGGACACCTTAAGGAACTCTGTCATTTAGGCAGCTTCCCTGTTCCTTCGGGGATAGTTAAGGCCTCT}$ ATTTCTGCCAAACCTGTCACTTACTGATTTTATCTCTGCAAGTTCTAGCACCTCTTTTGGAGACACCCGG GGGTGACAGTCATGTGGTATGTGCTAGGTTGCTAGAGCCTGTGAGAATATACACGTGTAGACTTTTCGAA GATTTTACTACACACTGAAGTTAGGATGTGATGGTACATAAAAACAAAATTCTCTGCTAATATCTTGCTT GGTGATTAAGCCATTCATCTTCTGCCTACCAGAAGCTAGTTCCATCAGCCTGCATGGTCTTAAAGCAATG ACCACACTTGTCACTCTTTGTATTCCCAGTGGCCAGCATAGTGCTGAGCACACAATACACGTTTGCA TGTGGCTCATGAAATGTTAATTAAATCTACTTGAAATTAAATATCACAGAGAAGGCCACATTTATATCTA TTTGTAGAAGGATCTCAATATTTTCTTACTCATTCTCTTACTCAAAGAACATTTCATTAACACCTGTTAG AGGAAGGCAGGTATTGGGATAGGCGTGCTATATTTTAGCAAGGTGAAGGATGGCCCCTGGTCTCGAGAAG CTCAGTCAAGGTGGGGAGACAGGCAAATAAACCAATAATTATAATAATGCATGATAGGAGCTACTAATAG CCAGGTAGAGGGTGCAGCATGTACACAGGATGATAAGGGAGCACCAAGAACAGTTAAGGAATCAAAAT CACTCTGTCAGGCAGAGTCTGTGGTTATTGGGGGTGGTGGGGATGAGAAAAAGGTGAGACCACAGTCT GTTAAAAGCTTGCTTGGATTGTCCTGTGGTGATGGGGGCTGGCAAAAGGAATTTAAGTGGAACAAAAGCA AGTCTACTAACATCTCCCAGAATCATCCACCACCCCAGTTTCCTACCCCTAGAATTAGTTTTTTGAAAT TATATCCTATGTGTCCCTTTGTCCAGCATTACCCCTCTGATTAGCCTTCTTGTTTCAATGAAAAGACTTC TGCTCCTTTTGCATAATTACCTTGTGCTTCTGAAGAAGATGTTTAACTTGAGATGCAGAACTTGGTGAAT GCACGGAGTCTTCATCTGAAGTTTGATGCTCCACATTGTTCATCCAGCTAATCATTTCTGTGATTGCTTT ${\tt ACGAGACGGCAATTTCTCCATTTGAAGCTGTAAGAACAAAATGATTTCCATTTAATTGCCTGCAGTTAAC}$ AAAATGAATCAGAGCATCACTAAAGATGATATCTGGTTTGATAAAAGGTCTTGCTATATAATTATGCAGG TTACTCAAAAAAAAAACAAACCCAGCATTCAAACTTAGAATAAGCGACCCCAAAACAATGACAATGACCT TCACATAAACTAACACAGTGGCAAAGATAAACTGAGAAATAAAGTAATTAAGCCTGATTTCTCTTTAAG AAAAATCCCATTGGAGGAGGGTCCAGTAATTAAGACTTATATTCAGTGGTGCCAGAGAAAAATAGGTAGT GTCAATGAAAATTATTGAGTCAGAGAAATAATTTTAAAAGAGTTATGAGCTAACAAGTGAATGCTAATTC AAATGCTGAGGCTCTAAAGACTTACCTGGTGAAGTTTTTCTTGAATATCTGGAAGTTGAGTTATGAGCAT AGCTGGTTCCCGATACTGATAACGGCAGTCTTCAAGGAGGATTTTTCATCAACTTCTTTTGAAAACTCCT AAAGGAGAGTTTTAAAATTTAGAAACTTAAAATTTAAATATAGCAGAAAGTAAGAGTCGGAATAACTGGC ACTGTTGGGCATTACATACACGATGGGGAACAAAAGAGATGGAATGCATACCCCTCAAGAAGCTTATCAC CCAGTGGGTTAACATTTTTAAAAATAAGTCATTATTTAAATGGGGTAAGTTTTACAATAAACTATGGAAC CCAACACAAAGTGCACATTAAATGAATTACTTGCAACAAGTTTGTAATTAAAATGTTTAAATCTTTCCTA TGTAGAAATTCTTTCAAGTATGTTGAAAAAATTTACATTTTAATAGCAAAGTTAGTAATCATAGCTACGA AGTATGAAAAATAAAAAAAAAAACAGGAAAAGTCTAACAGAAAAGACTACGTTTCATAAATGCATTGACCA ATAATCATTTTGTAATTATATACAAGAGTAATACATTTTTATTTCCCCCAAAATTTGGGGGATATTTTT GAATTTTTTTCCAAAAAACACCTCAAAACAATGGAACAAAAGCTTTTTAGTAGAAATATCAATTTTGTTT ACAATAATTTAAAACTATGCATTTATTAATGTTAACATTTATAAGTTAATAACCTTATAAAGTTGTTTTT GGGTCTTGTATTTTTGTATTTGTAAAACATGACCTATGTCAGTGCAAGTTTTTTTGAGACTGAGTTTCAC GTGATTCTCCTGCCTCAGCCTCCCGAGGAGCTGGGATTACAGGCATGCACCACCATGCTCGGCTAATTCT GTATTTTTAGTAGAGACAGGGTTTCTCCATGTTTGTCAGGCTGGTATCGAAATCCCGATCTCAGCTGATC ${\tt CACTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCACCTGGCGCAAGTTTTAAATT}$ CAGATATATTTATGGGGTCAATTAAAAACATATTTTATTATAAACGAATGAACAGTATAAACAGTTCTA CATCAACCCTGATGCTTTTTCCTTGATATTTATTTCTGACCAGTAATTAACTGAACATATGCTATTACAA CTTACAAAAAATTGTTGATGTTGCTTCTGATTGTATCCAAGTCCTGAGACACATTGAGGGACTGTTCTT TCCAGTAATTCAGAGTATGCTGGGAAGATTCCAACCACTTGGTTAACTGATCCGAATCTCTGTTATAACT AACAGGAGCAAAGTGAGAGAGGAGGCAGATTAGAAACATATTCTGATAATGATATGCATCACCAGCAAAT TTTCTTATTTTATTGTATGTCCTCCTATGTTGATCAGTCCTAACATTCAGAATATCATGACGTTAATAAG GATTATATCATGTTTTATACCATGATGCTCCTGGCATTTTCTAGGACTCTCTTCATTACAGCTCAGCAAG AACAGTGAGGATTTTAGGCCAGATGTGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAAAAA GGTGGATTGCCTGAGGTCAGGAGTTCGAGACCAGCCTGAAAAACATGGTAAAACCCTGTCTCTACTAAAA AATACAGAAAATACCCAGGCATGGTGGCAGGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAG AATCGCCTGAACCCAAGAGGTGGAGGTTGCAGTGAGCCGAGATTGCGCCACTGTACTCCAGCCTGGGCGA CAGAGCAAGACTCTGTCTCAAATAAAAAAAAAAAATAATAATAATGAGGAAGTCTAAAGCATTCTTTA $\tt TTTCTTATTACAGCTACACAAAAGTATACCCAATGAAGGAACAGAGATTTTTATCCATCAAATGTCTTCT$ ATAAATTTGTTTATATAAAAATATAGGTCAGGCACAGTGGCTCACTTCTGTAATCCCAGCACTTTGGGG TAACAAGGTGGGAGGATGCCTTGAGCCCAGGAATTTGAGACCAGCCTGGGCAACATGGAAAAACCCCATT TCTACAAAAAATACAAAAATTAGCAGGGCGTGGTGGCATGTGCTGTGGTTCCAGGTACTTGGGAGGCTGA GGTGGGAAGATTACTTGAGCCCAGGAGGTCAAGGCTGCAGTGAGCCACGATCACGCCACTGCACTCCAGC ACAACAAACTGCTGCTGGCTGAACACCCAACGTATTTGCCCGAGGTAGTGAAAATATTCAAACAATATTC TGCCCTTCTTGTAACTTTTAAACTGCCTTAGATTAAGATGCAGGGATGAGAATGATGTTTAAATGTTCTA TGTTCTCCTCCTCACACGGTTCAAGATTATACCAACTAAGCACAACAAATTCTCCAAAGAACTCAA AAGCCTATTTCAAACTATTCTGTTAGCTAAAATCATTTAATTTTTTTAATTTTTAAAACTTTTTGGAAAGAG CAATATCATGGTATAAAGGTAACCTATATATTATTATATAACATAATTCCTAGCTTCTATAGAAATGTGT AAACTAGCTGGGTGCAGTGGCTTACACCTGTAATCCCAGCACTTTGGGAAGCTGAGGCAGGAGGACTGCT TGAGGCTAGGAGCTTGAGACCACCCTGGGCAACAATGTGAGACCCCATCTCTACAAAAAATTTTATAAAA TTAGCCATGCACGGTGGCCTATGCCTGTAGTCACACCAACTTGGGAGGCTGAGGCAGGAGGATCGCTTGA GTCCAGGAGTTCAAGGTTGCAGTGAGCTATGATAGTGCTGCACTCCATGCACTCCAGCCTGGGTGAC AAACTGATTACATGTTATACTGTGTCTAGCAAACCATCAGAGATTCTACATCGCGTTTAGCCCAGAAGAG GGACCCAACTGCTTTAGACTGCCCAAGAAAAAACAGCATAAGGTGGGTTGCAGGTAAAATTTAGTTGACT ACAGAATCCCCGAGGTCTTTCTTCACAGCACAATATGAAGCCAATCCACCCCCAAAAAGGCTGACCTGAG CAGATGCTTGAGAAGAGCTTGCAGCCTGTGGAGCTCATGGTCAATTTTCTTGTTCAGGGACAACCACTGC ATAGAATGAATTATTTAGAAAATAAAGTCTGCCAAGCTATTCACAAATACTGCATTTAAAACTGACATTT GTGTCCACTGATAAAACAGTAACACTTTCCCAACATTCAAGACTATATAGTCTGACTGGATGCATGATTA ATGGTTTATTGGTTACCTTTCATGATAGGTGTCCAATCTTGCATTTCTAGAGCACAGATTCAACTTTGTA ACCTGAGGTCTGCAGTTCGAGACCAGGCTGACCAACATGGTGAAACCTCCTCTACTAAAAATACAAAA AATTAGCTAGGTGTGGTGGCCATGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCGGGACTTGGTGGC GCACACCTGTAATCCCAGCTAGCCAGGAGGCTGAGGCAGGAGATTGCTGGAACCCAGGAGGTAGAGGCT GCAGTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGAGCGACAGAGCGAGACTGTGTCAAAACAAAACA TGGCAGTCATTAGGCCATGCTGAGCTCACAGATAGGTTTTGTGTGACCTTAAGATCAGTTTGAAAAATCA GGAAATCTTACCTAATAATCAGGATTGCCAGTGTCTGTGGGAAAACTGGAAGACCTAGCAATTGTTGGTC TGCATCTCATGTGGCAAAGGGCGGCTGTAACTGAGCAGCAGCTGCTGGCTCTAGGAGAGCCTACTCCCTC TCCTTTTCCCTTGGCTCAGTCCCCACCCCCTCTGATTGCAGAGCCAGTAGGGTTTCCTTATTTCTATT TCCATGAGATGCGAATACTAGGCAGAAAAATTCATTTCCAGGGTCTTCTACTGAATATAAAGATTCAGTA GAGAGAAAGGAAGAAACTTTAGAAAAATAAATTAAAACAGCGTATCATTAATCCAACTTCACGGAAAGA AAAATGAAATTCTTTGAAGAGAGTCTGTCTAAAGGTAATTATCTAACACAGCTGGATTCAGCTAATGCC ATTTATCCTGACACCTGTTTAATCTTAAAAAATAAATTATTAACAAAACAGAAGGTTTGCTATTTTCAAA TTAAGTTAAGCCTTTTAAATCATTACCAAAAAATTCCACGTCCATAGCCCTTTCCACCACTCCCATTTGT TTTTTTTTGAGATGAAGTCTCGCTCTGTCACCCAGGCTGGAGTACAGTGGCGCTATCTCAGCTCACTGC AGCCTCCGACTCCCGGGTTCCAGCGATTCTCCTGCCTAAGTCTCCCAAGTAGCTGGGATTATAGGCACGT GCCACCACACCCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTTACCATATTGGCTAGGCTGGTCT CAAACTCCTGACCTCAGGTTATCCACCCACCTCGGCCTCCTAAGGTGCTAGGATTACAGGCATGAGCCAC CACGCCCAGCCTAATTCACCGATTGTATGCATGGGATACAGTCTGTGCACGAGTAACTAGGCTGAGCCAG CATTTGAACACAGGTTTGTTGACTTCAAAGGCCAGACAACTGACTCCTAGGTTCCATGCCCCACAGACGA CGGCTGATCAAGATGACAACATCTGTCAGACTCACACAAACCTTTCCTTGATTCTGAACTGAGAATGGCC CTTAGAACAATTTTTTTCTTTTTAATATTTCAAATGTAATAGAATCACACATTTTAACAGATATGGTCAC TTTTGGAGAAACAATCACACTCATATTAGGTTGGCTAATATTAGACTGTTGCTTAAAATAATAAGCCTT AAAATACTGTTCTCATCTGCATTCTTTCAGCTGTTTAGATGATACCTTCTGTATCCCTAGACTAACAAAG CTCAATATAATTAATAAGGCGGCAATGAGACCAACTGTAGCTTTCCAGGCATCTAGGGAGTATAAATACA GTGTCCCAGCCTCTGGAAAATGTTCCTTATAGAGGTTAAAATACCTCCATGGAAAAGAGAAACCCTGGAAT TATTTCCTGCTTTCATTTCCAACTAGTTCATTCAGGCAATAAATGTGCTTTTGAGGTTTTAAAGTTGAT ATTTCATAACTGCCTCTAGCCGCACAACTCAGATTCTGACGGCATATATCCTAAAGTTAAAACTAGGAAT TTTAAGTTCCTGGTGAGAAGACTTAAAACTTGTTTTTTATCTTGTTGGTCATGTTCTCAATGTCACTTGAA AACTATTTTGAGGTTTTATCTTTTCTTTCGCACCAAAATTAGAGACACAGAGACAGATGATAACAACGCA GTCACCCAGGCTGGAGCGCAATGGCATGATCTTGGCTCACTGCAACCTCCACGTCTAAGCAAT TTTTTTTTTTTTAGTAGAGACAGGGTTTCACCATTTTGCCCAGGCTGGTCTCAAACTCCTGAGCCCAG GCAATCCACCTGCCTTGGCCTCCCAAAGTGCTAGGATTACAGGTGTGAGCCATCGTGTCCGGCCTGAGAT GTAGGAATAAAACGAAATATATGTTTAGAGGCCGAAGGCTGACAAAGTTCTTTCCATTCTTCAGCTCATT TCCATACTAGTAGCTCACTGGCATTCACTTCCAGAGACAGGTAGAATTGGCTCGATTATCTGCATTCCAC AGATAAAGAAATTGAGGCTTAGGGACAGCAAGGTCACAGAAGTGATAAGTGATGGAGCCACGACTCAAGC AAGGTCCTCTCCCCAAGCCAGACATGTGGTTATGCTAAGGAGTTCACATTCAAATCTGTAGTCTCCCTG AATACATTCAACAGTGAGTTGTATGATGAACATTTTGTTTCAATTCAAACCTTCCAAATCAAGCCACTTA GTCAAAACAAATGTAAAACACAAAGTGCTATGGACACGCCTTTGATAACTTAAATGGAAGACAAATACCT GGTAAAATGAAATCCTTTCCACTAATCTTTCCTCTGTTTCCTCCACCAAACTCACAGAGGGCAATGTAGA

TATAAGAATTTCCAGGTCCTTTTCAAGAGATGCATAGTTTTCATCAAATTCTTCCCATTTCTAGAGAATC AAAATGAACACCAAGACCATACAAAATTAAAGCACAGATTCCAGGTGTGTTCGAGAGACGTAACCCCACC CTGGTAAGCGCTCAGCATCTAATGGAAAAGAATTCCATCACCTTTGAGGACAAGGTTTAAAAAGAATCTG AGTTGGCATTTAGTGTTTTATGCTTGTCTTGTCAAACTGGGTAACATGACTAAAGGAGTAATACAATGAA GTTAAAATGATACTCTTAGCAACTCCGTAGAGACCTTGGAGCCACAAGAGAGCCTTTCTCTTATTAGGAA AGGGAAAGAGCTAACTTTTAGACCCTTACTCAACAGAAGCTATTAGGCTGCTCCTGCTCCCAAGCCCAC GCCCAAGCCCACCAAACCCCCATGCCACTTGCAGCATAGGTCTGCTCAAGGTGTCTTTGAGGAGTATAGG CTTACACTTCATCAGGGGAGGACAACTGCCTTAGCCCTAGTCTTGTCATCTTTTAGCTTGCCCCGTTTCC ATGGATGCCCACCCGAGGACCCCAACACACACACAGAGCTGAGTTATTGACTCCAAACATTGTCTGTTAG GAAAAGAACCACCTCACTCTTTTCCATATCTATTCACATAGTGGCTCACTTGGCTTTTATAGAACACTCA TCTTTTTTTTTTGAGACAGAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGTGCAATCTAGGCTCA CTGCAAGGTCTGCCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGC GGATGGTCTCGATCTCCTGACCTCGTGATCTGCCCCCCTCCGCCTCCCAAAGTGCTGGGATTACAGGCGT GAGCCACTGCGCCCGGCCTCCTTCCTATTTTATTTCCTTTAAGTACTAACATTGGCTATGAAAGGTGTGA TCATCCATTTTAGGACATCTGGGCCTGTTCTCTTGAAGAAGTACAGTTTTTAAACCAATAACTGTTTCAC CCAAATGATCTCATTCAAGGTCTCAAAGTGCTTATCGTTTTGCTTATTCATACATGAACCTAAAAGGCAG AGAGACGCAGTACCATCCCCAATCTATGTATGAGAAATCCCAGCCAACTTTTCCTTCAGGGAGCGGCCTC AGAACCTGAGCAGGGGTCCACATTCCTCACTGTCAGGCTTCCATTTAACTATAGCTTAATGATAACTAGA TACTTCTTCTCAACACCTGGGGTGGTGATGGAAAATCAGCAATTCCCAGCTTCAGTACAACGTTTACATA ACCCAAATACCTGCAACAAACTCTGCAGCTTCATACCACATTGGCGTGACTTTTCTTCTAGTATTTTAAC GCTTGGATCAACAACATGTCAGCAACAAGCTTCTGGAAAAAAACCTATGAGATGGAGAAAGTTTTAATAT AATCCAAAATCCCAGGACATCCGTGTAGAGTCAAATTGACCAGCCTGGCCAAGATGGCAATACAAAAATT AGCTAGGCATGGTGGAATGCCCGTAATCCCAGTCATTTGAGAGACTGAGGCAGGAGAATCATTTGAAC AATTATAAAGTATTACCCTTAGGTGTTATTTTCCACTAAATAATCCATTTTAAATGACAAACATTTTTGT GACCAGGATCTCGAGGCTACAATGAGCTATGATTACACCACTGCACTCCAGCCTGGAATACAGAGTGAGA TGAATTTCAAGACAAGTTGGATGGACAGATGTGCAAACTCAAGCAACCCACATATTCGAAAGACAGGTCT CCTGGACATAAAGCTTCCTGTATTTGTATTTGAACTTCAAGAACCTTTCAAGAGGAAGGCTTTATTTCAC ATGGTTCTTCTCCATTTACAGTTGTCTGGAGGGATCCCTCCATATTATGTGAATCCCTTCTCCTAAGCCT TGAAAAGGACATATACATAGAGACGTTTATAAAAGCATCTAGCAAGGGGCCTAGCACACTGCAGATAATC AATATTATTTTCTCCTCTTCCCCTCCATCCTTCATACAATATTTACCTTTCAATTTTTCTTAGACTAAGC TCTACCTTCCAAATGCTAGACCATAAGCTTACCTCAGGTAGGAACCGTCCTACACATTTTTAATTATCAG CAAAGGATTTACTATAGTCTTATACTACATAATAACACACTTTCCTTTTGATTCTAGTTCTCAGGAAAGC CTTTTCTTCTTTTTTTTTTTTTTTTGAGATAGAGTCTTGCTGTGTCGCCAGGCTGGAGTGCAGGGGCGTG ATCTCAGCTTACTGCAACCTCCGCCTCCTGAGTTTAAGCAATTCTCCTGCCTCAGCCTCCCAGGTAGCTG GGATTACAGGTGCCTGCCACCATACCCAGCTAATTTTTGTATTTTTGGTAGAGACAGGGTTTCACCATGT TGGCCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCACCCGCCTCAGCCTCCCAAAGTGCTGGGATT ACAAGCATAAGCCACTGCGCATGGCCAGGAAAGCCTTTTCTAACTTTCCTAAGTCACCTTCTGCTATTAA TCTCAATCAGGTGAAAGCTCTGTGAATGTAAGGAACTGTGTCTGTTTTTACTCATAACCCAAATTCCTAG TTTCAACAAAGAAGAAAAATGGATCCTTTCTGTTCACATTCAGAAATACCTTAAGATTTTAGTCTATGAA GGGGTCACCCGACCCATGTGTCTCTCACCTTGTGATTTTCTATTTGAGCCTGTAACGCCACTTTACTT CCACATACTGTCAAGTACATCCTGAAAAGAGAAGAGAGCAGGTGCACACATGCATTTCATCCAACCGGGGC AATAACTGAAAGACAAATCTAAACTCTGCTGGTGGAAGAAAAGGATCTGGCTCCTCACAATCACAGTGCT GAGTCAATGTTTTCTGCTCAGGCATACCTCTAATTTGTAAACCTCCTGGAGTAAAGCATAAGGTAAATGA AGCCTCTCCCCTTCATCTCTTAGTTTGGCCACTCGGCTCTCGGCGTTCTCCAGCTCCACTGTATATGCAT CTGCTTTCTAAGTGAGAGACAATACAAGAAAAGAAAACCCTTCAGTAAGTCAGAGAAGTACACATAGTTA TCTAAAAAGAATTAAATAGTACAGAAAGGGATGAAGGGAAAAGCAAAAATCCCAGCTCCCGCTCCCTCAC $\tt CTCCTGCTCTCCTTAACAATCTTGCCAGAGGTCCCAAGTTCCTAACATGCTCCATACCAGTAGGGGTAGA$ AGCTCTTCAGCATCTCTTCACATTGGTATACACATATCTAGCTCCTTCGAAACAGACACACAGCATGCTA TTGTAAGGGTGTACCCTGCTTTTGTTATCAGTCAGCTCTCAATGGACTTTTGGGCTATATACAGTTTTTA GTCTGGCTCTGTCACCCAAGCTGGAGTGCAGTGGCACAATCTCAGTTCACTGCAACCTCCGCCCCCAAG CTCAAGCAATTATCACACCTCAGCCTCCGGAGTAGGTGGGACTACAGCCGTGTGCCACCTGCACCTGGCTA

ATTTTGTATTTCGATAGAGATGGGGTTTGCCATGCTGGCCAGGCTGGTCTTAAATTCCTGGCTTCAAG TGATCCACCTGCCTCAGTCTCCCAAGGTGCTGGGATTACAGGCGTGAGCCACCAACCTGGCCAAAATATT TATCTTTATGCACTTGTCTTATATCCTTAGGAGGAGTACAAGTTCAGCACTTCAAACAGTGCTGGAACAT TTAAAATTCTGATATACAGACAAAGGATCCCCAGGGCTCCCCTGGCAAGAGGATGAGGGTCTCATTTTCC AATACCCTTACCAACACTGGACATACACATTTTGTCATGGTTGATAAGTGAAAATGGCCTCCTTTTGTTT TAATACATTGTGCTTCAGAAAATTAGGAGATGTTTTTAAAAAAGTCAACATAAATAGTTCTCATTTTTTAT TTATTTACTTAAGCCTTGCTGCTCACAAAGGAAAGTAGTTCAGAAGCACGGCTTATATGCAAAGCTC TGTGGTTCAAAGTTAAGTCAGTCTGAATTATTTTGACTTGATTACCTGAAGCTGTTCAGCAACACTCTGC CCACTGATTTCATTCAAAGACTGTTGTAAAGATGTCTTACTCTTAATGAGCTGATGATATAATCTCTTTA TTTCATTCTGTAAGATAAATGTCGGAAACTGAGCAATCTCATTTAGGCCTTCATTATCTTTTTTATATT $\tt CTCAACTGTACCTAATCTCCTTTCCTTCAGGCTATTTTGAAGCAAATCCCAGGTCTCAAGTCATTTCATC$ AGTATACGTTTCAGTATATTTCTAAAAGATAAAGATCCTTCTCTTTACTCCAACATACTCCTCCCCTG TTTTTCTTTTTGATTGTTTCAATGATGATCCAAATGAGGTCCACATGTCATGATGGATAAATACATCTT AGATCTCTCTTAACCTGCAGAATCCCTGACCACTTTTTTTGTTTCTTGAATGTGTGTATGTGAAAAAATG ${\tt GGTCATTGGTCAGTACAGTTTCCCACAGGCTGGATTTGGCAGACTGCACTCCCAGTGTGCTGTTTAACC}$ GGGCAAGCCTCATTCATAAATAGTATTGGGTTTCATTTCTTTTTCATTAGATAATTTTTAGTAGCTTCCTA ACTCTTCTACCTGCCTGGAGTCTCTGCCTCTCCAATTCACTTTAGACAACTGCTGGAGGAATCTACCTGA AATGCCTCCCCGCCCACCATTTTAATTGTTAAATGGCTAAATGTAATACAAGAAATGAAACATTATTT CCTCCCAAAGTGCTGGGATTACAGGCATGAGCTACTACGCTCGGTCAAGACTTTAAAGGGCTTCACCTTT ACTTCTGCCTCCCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAGGTAGCTGGGATTACAGGCACACA CCACCATGTCCGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCATGTTGGCCAGGATGGTCTC AATCTCCTGACCTCAGGTGATCCGCCTGCCTTGGCCTCTCCCAAAGTGCTAGGATTACAGGCGTGAGCCA TTCCCTTAGCAATTCTTATTAACAAATGTCACCAGGAATAGGAATAGGCATTAGGGGTTCATGCTGTAAC TTAAAACAGTGCCAAAATAGGCTGTGTGCTCGGAATCATACCTGGTAACTGCGGTTGTAATCGAGGCCAG CTTTCAGGGACTTGCTTCTACAGACAGCTGCAGCCTGAGTGTGCTCCAGGCAGACTTGAAGGTTGTCAAA ACATTCAAGGAGCAAGTTGGTGTTCTCGCCAGGCCAAGTCATGGCTTTCAAAAGATCACCCTTCTTGTCA TGAGCTCTGACCTCAAGAGGCTTCCACGTGGGCTTAACTCACGGGGCTGCTGTAATGGCCAACACATGGG CTCCAGCATCTCCTCCACACTGCTGAGGCACTGACTGAGGGTCAGGAATAGTTCAAACAATTTTTTATCC AAATTGATATATGCTTCTTCTGTCATATTTTCCTGAATCAAGAGGAAAAAAGAAAAAGAAAATTAAGATA ${\tt CCTTTGCCTTCCTAGACCTATATTTTGCCTAGTTTCCATTATAGTTTATGATTTATGTTATGCTTCTTTT}$ TGGAGAAAAATGAGTTTAAGAAGCTCAACGTTAGGTAGTTATTTGAGTACTGCATGGAACTAAAAGGTAA ATCATGAGATGAAGGATCCCTTAGCAGGGCGATCCAGGTGAAAGTGTGGTCCCAGATAAATTACACTGTC TCCTTTACCACTGTTTCCCACCCTCCACATTCTAATGTAGGAGAAAGCGGTTAATGAAATCAAGTATAGC $\tt TGGGAGAAGGAAGGAGGTCACAAAAGAGAGGCTTGAAGGGGTTGATTACAAAGAGGGGGTACAGTGTCT$ TAAAAACAGGAGCAGCTGCAGAGGAGGGGGAAAGTGTCATTTATGAGCCGATTGTGAGAATCAAGGCTT AGGTGTATGACTCCAAGCACGTCCCCAGTGTCATGCATTGCGCCTGGTGAGTCTGGGAGCCACAGATCTG TTTTAGCATAAGCTGCTGGGGCCACCTCTTTTCTTTACCCACAGTTACCCTGAATTCTTGAACAGTTAT ${\tt AAGTAGTTTAGGAGCATGCCATAGCTAGTCATCACTCCAACTTGGGCCCTGTCTCCTACTATCTTCTCTG}$ ATAGACACCTCACATAACCTAGCATTAATTACCTCAGTATTAAGTCTGCTCAGGGTTGAAAACCATGCCT ATACTCCCTCCTACTCTCTCTCACCCTTCCAATCCCAGATCACCACTGCAGACGGCACTCATCAATC ATGATCCTCTTTCCTGCTGATCCTGGACTCAGAATCCTTTGCACACAGTCCCTAGGGAACCACTACAAAA TATATTAGAGTTGGCAAGCAAGATCAATTCAATTTGCAATCCTAGGACCCATTCCATTATGTTTCCTTTT ACTTGTTCAGTGACGACAATTATGACCAAGTCACAATGATGATATCTCCTTTGTTTATGTTATTACAATG AGGAAAACACATTGTGTGCAGCTTCTACCTGTGTCTGAAGGTTACTTGCTTCTTGGCGCAGGTCTTCAAG TTGGGTGTATAGGTTTTCAGTTCTTCAGTTGTTGGGTATCTAAAGTTATACATAGTCACGCTGGGTAGA ATACCCATATTTGTGGAAACCTATTTGACAAAGGAAAACCCTATTACTGACAGTTTTAGACCCTGCTGAT GTTAATTAATTTATTTTTTTTTTCGAGATGGAGTCTTGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCA TGATCTCCTCTCACTGAAACCTCTGTCTCCCATGTTCAAGAGATTCTCCTACCTCAGCCTCCCGAGTAGC $\tt TGGGATAACAGGTGCCTGCCACCATGCCCGGCTAATTTTTGTATTTTTAGTAGCGACGGGGCTTTGCCAT$ GTTAGCTAGGCTATTCTTGAACTCGTGACCTCAGGTGATCCACCTGCCTCAGCCTCCCAAAGTGCTGGGA TTACAGGCATGAGCCAACATGTCCAGCCTGCTGATATTAATTTAAATAGAAAAAGATGCCTTAGCATGCT TTAATATTTTGGACAGCTTTGAAAAGTCATGACTAGTTATATTTTAGATACTTGAGGTTTCATTTAGATAT CAAAATGAGAGGAAAGGCTGGGCTTAGTGGCTTATGCCTATAATCCTAGTACTTTGCAAGTAGAGGTGGG AGGATTCCTAGAGGCCAGGAGTGCAAGGGGAGTTCAAGACCAGCCTGTACAACATAACAAGATACATTCTC TGCAAAAAAAAAAAAAATTATACAAAAATTTTTAAAGTAGCTGGTCATGGTGCTGCACACCTGTAG TTGTCACCAGGGCTGGAGTGCAATGGCACAATCTCAGCTCACCTGCAACCTCTGCCACCTGGGTTCCAGCA ATTTTCCTGCCTCAGCCTCCCAAGTAGCTGAGATTACAGGTGCCCACCACCACGGCCAGCTAATTTTCGT ATTTTTAGTAGAGATGGGGTTTCACCATGTTGACTAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCCA CACGCCTCAGGCTCCTGAAGTGCTGGGATTATAGGCGTGAGCCACTGCACCTAGCTGAGACCCTGTCTCT TAAAAAAAAAAAAAAAGGTGGTGTGTGTGTGTGTGAAATCATTAATCTTTCAGTTTAGTAATAAC AACATTCACGCTACAGGGCTAGCTGCTTATTTACCAGTTTACTTTTGACACAGCCAACTATTAGAATAGA ATTCAAGTCTCTTCTAAGGGATGGGTTTGCATCTTGATTTGTTATTGAAAAGCTAAATAAGTACTGAAAA TGAGCTGTGATTTCAGAAGGGTGAATGATTCAGAATTAGCTCCTTTCTCAAACTGGAAAGCTGACAAATA AAATGAAACAGGGTGAGGTGGTAGATGACTCTGCTTGGGGAAAGAACTAATAATGAGTGGAGTTCTCCTG TTTGCAAGAGACCTATGTACACGTTACAGTGTAATATGGAGAAACCAAGGTTAAGGGCCAACTGATGAGT TTGATTGAACTTTAATTGGTCAAATAAGGTCCTTAGCGGGAAAGAGGACAGCTGAGAAGTCCTATCAGAC TGGGAAATTGGGAAATCACGGGTAACCTTTGCCCAGGCAATGTGAGTATGTGGTGGAAGGCAGAAGCCTG CAAGCCAGCCTGATAGAGCCTGTGACGGCAGTGATAAGGAGGGCCAATCACAGGGAACACCGATTGGCCA GGAGTGCAATGGCGCGATCTCAGCTCACCATAACCTCCGCCTCCCAGGTTCAAGCAATTCTCCTGCCTCA GCCTCCTGAGTAGCTGGGATTACAGGCATGCACCACCACGGCCAGCTAATTTTGTATTTTTAGTAGAGAC AGGGTTTCTCCATGTTGAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCCACCTGCCTCAGCCTCCCAA ATTCATTCAACAAACAGTAACTGAGAGTCTGTGATGTCCTAGGTACGGTGCTTGGCACTCAAATGCAAAC GCAGGTTTCCAAGATCAAGAAAATGTATCAGCCAAGTAAAAAACTCACTTGGCAACTTTGCTTTCTGGAG AATATACATGTTTATTTAATGAATGCTTGTTGGATTTTCAAAGATAAACAGGCTATTTGCACCATGTAGA GATATTGCCACTTATCTCCATTTTGGCCCTGGGGTGACAAGATCGAGTCTGGAACGTCATTTTCAGGGCT GGATGCCTGGTTGCTTTTGAAGAAGAACAAAAGGTGAAGAGAATAATCAACACTAAACATTTTGTATTAC ATTCACAGTTCTATGAGCAATTTTTAAAAGAAACACTCTTAATTCTCCCAGTCATAAAACCACTGAATGA CCAACTCTATTTTTAAATGTTTTACCTTGCAGATGATTCCTGAGTTGTATCGTTATCATGTTGGCAATAC TGGGGCCACATTTTCTTAGCATTAAATTCTATGAATTTGATGAAATCTTTCTGTTCCATTGGTTTTAACT CCAGAACCTGTAATTGAATGAGATTCAAATGGTCCAATCCATCAAGCTTTTCGATTAGTACCCACTAGTT TCCTGTTCTTGTAAACTCTCACTTCCCAAAAACCTATTTAAAATATTCACACAATAACTGTTATTTAAAC CGCATACATGGAAAATCATCAAAGACATACAAACACATTTTGAAAAGACAGGCAAAGCAGAGTCGCAACT ACAGAAGTTCACCCTGAAGACAGCTGATATAAGATGTAAGTTAATAAAGGAGCAAAGTTATGGTGTCCCC AGTGTTAGCAGCTGAAAGCAAAGCAGATGCTATGGTAAATGCTGAAAACTCTCAGAGTTTCTGCACACAC TTTTGGAGACATGGTCTCACGCTATCACCCCAGGTTAGAGTAGAGTGGTGTGATCTTAGCTCGCTGCAAC GAACTCCTGACCTCAAATGATCTGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCTACT GTGCCTGGCCTTTTTTTTGGTTTTTGAAACAGGGTCTCGCTATGTTGCCCAGGCTGGCCTCGAACACCTG GCCACAGGTGATCCTCCCACCTCAGCCTCCCAAGTAGCTAGGACTGTAGGTTTGCACCACCTTGCCTGGT TAAAAAGTTATATTCTAGTCCCTACAACTGTTGGGGGCTAGAATTACCTGTTGCTGCAAAATCTTTTT GTCTGCTGAATTGTGGCCTTTCAGTTACAATGGATTCCAATTCAGAAAGGTTAACTGGTTGGAGAGCTTC GGAGTTTCGCACTTGTTGCCCAGGCTGGAGTGCAAGGGCATGATCTTGGCTCACTGCAACCTCCACCTCT TGGGTTCAAGGGATTCTCCTGCCTCAGCCCCCCAAGTAGCTGTGATTGCAGTTGTGCCCACCACACCCAG $\tt CTAATTTTTGTATTTTTAGTGGAGACGGGGTTTCACCATGTTGGCCAGACTGGTCTCAAACTCCTGACCT$ CAGGTGATCTGCCTCAGCCTCCCAAAGGGCTGGGATTACAGGCGTGAGCCACCACACCCAGCCTAC TATGATTTAATGTACCTATTTCATAACAACTTCAAAAACTACTACATTTGGTGAAGTGATCATCTTACTT ACCAAATAAAAAGTACCAAAAAGAGAAACAGTATTATAAATTCAAATTTCCCCTATGGCTAAAATACAT TTTTTTTAAAAAGAGAGAACATATTAGGATGAAAGGGGAACCATATGGCCTATGTATCTGCAGCCAGTCT TATTTCTGTGAACATAAATCTCTAAGTAGGAACCACTCATAAGCACATGCAAATCTTTTATAGTAAGATC TACTCATAAGATGCACATTTGCATTTATAAACACAGAGTGCTTTTAAAAAATCATGAGAACACTTTATATG ATACTTTGATTATATATATAAATACTTGCAAATGAATAACAAAGTATCCTGGAAACAGGTTTATGTTTCT GATGTCAAATTTTAGTCACATCTATGAAAGCTTTGTTTTCCAGTCAATTAGAGTCACAAAATTCCTTTAT AATACATCCTTCTTTTACGAAGAAGCCTTACACTAGACCTCACTGCCAACAAGAACACTCAGCTACATTA AACCAACACAAACCAACCACCGCCATCACCAACAACAACCTAGACAGGAAAACTGCAAAGTAGAATGAA ATAAAAATAACAAGCCAGTGTACTCATCTATGGTGTTAATGTGTGAAATTCTTTCACACTTAGTACAGTT TCTCTGTAGCTGGTTCATCACCTCCAACCAGAGTTCTCTTCTGGCAGGTCTGCCACATATGTGTATCAAG ATGAATGTCCATAGATAGTCATTTTTTACCTGATCTTCACTGTGCTTCTCCTGAAGCATCATCTGGACTT TTTCTAAATTGCACTTCACTGTTTTCAGTTTCAGGGAAAGCGCTTCAGCCTCATGTTGAGTGGCTCCATT ATCTCCCAGGCCCTGATCTTTGCAAGTCTCTAACAGAAAGGCAACCTTGTGCTCAATCTCTGTTAGCATA GCCTAGGAAATAAAAGCATTTAATTATTCATAATGTTGTTCTTGAAGAAGTATTGTGCCTGCAAACAAGT TAAGACTTACTCTTTTTACTTAAGTGTATACAAGAAGTCCCAGAAACACAGGATGGAAGAACCCTGGAA AAACAAAAACTTCCACAGAATTCTTGTACTTTTCAGTAGGGATGCAACCAAACCAATCCCAATTACACAT

GTCACTCTGTAAAATAATTTAAGTAAATGACTCTATAGTCGCCTTACAAAACATAGCAGAATGTATCCAG CAGAGGATAGTGGTTAAGAACACAGATCTTGGAACTAGACTATCTGGTTTCAGATCCCAGTCCTACCACT TAGTAGATGTGTAAACACAGGCACCTTACTTTAGAGGAGTGTGCCTCTAGTAGTCTGTAAAATGAAGATA TTTTTTCTGAGACGGAGTCTCACTCTGTTGCCCAGGATAGAGTGCAGTGGTGTGATCTCGGCTCACTGCA ACCTCCACCTCCCAGGTTCAAGTAATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAAGAGTGCG CCACCACGCCCAGCTAATTTTTGTATTTTAGTAGAGATGGCGTTTCGCCATTTTGGCCAGGCTGGTCTC AAACTCCTGACCTCGTGATCTGCCCACCTAGGCCTCCCAAAGTGCTGGGATTACAGGCATGAACCACCAT GCCTCGCCTACCTTCCTAATCTTTTATGTTGCAATCCAAGTGTGGAGTAGGAATTTAAAAAAGAATTCCA CGTAACTGTTTGAAAATTATTTCCCTTGCTCTTTTCCTTCTCTTTCTCAAGACAAATAAGCCTCCAAACT CTCACAACACCATAGAAGAAATAATTTGGAACCTGAAATATTTAGTTATTGATACAACCGGCCAATTCAC ACAAATCTAAAAATATATCAGCTGGATGAAGTAAGTTTCCCAGTAAGTCTCGGTCATTGTATTCCTGCTC GTCAGCAGCAACAGACAAACTCACATTCCAGCACCATGATCATTTGTACTAAAACTCGGTGCGTGACTAA GAACAAGTTCCATTCATTGAGCGAATTTAAGGAATTAAAAATTTTCCTTAAGGACGAACTCTATTCTTAA GCTTTTACTTTCTGTGGTTTCAGTTACCTGCAGTCAATCAGGGCTCAAAAATATTAAATGGAAAATTCCA GAAATAAATAATTCATACATTTTAAATTTTGCACCACCTGAGTAGCGTGATAAAATTGCACACCATCCTG CTCCATCCCGCCCAGGATGTGAATCATCCCTTTGTCCAGCATATTCATACTCCAGCACTCGGCTCATTAG TTACTTAGTAGAGGTTGAGTATACCTAATCTGAAAATCCAAAATCCCAAAATGCTCCAAAACCTGAAACT TTTTATGCACCATGCCAGAAGTGGAAAATTCCACACCCAACCTCATGTGATGGGTCACAGTTGAACTCTG TTTCATGTATAAAATTATTAAAGTTATTATATAAAATAACCTTCAGGATATGTATATGAGGTATAGATAA AACATAAATTGAGGCCTAGCATGGTGGCTCATACCTGTAATCCCAGCACTTCGGGAGGCTGAGGCAGGAG GCTCACTTGAGGCCAGGAGTTTGAGACCAGCCTGGGCAACACAGTGAGACCCTGAGTCTACAAAAAATAA AATTAGCCAGGCATGGTGGTGTACGCCTGTAGTCCCAGCTATTCCGGAGACTGGGGCAGGAGGATTGCCT GAGCCCGTCAGGTCAAGGCTGCAGTGAGCCATGATCATGCTACTGCACTCCAGCCTGGGTAACAGAGCAA TAGTTCCAAGCATTTGGGGATAAGGGATACTCACTCTGTAGCCATCTCAGTTGTCAGATCGAAAAAACAT AGACAAAGGTGGGACTACTCTACTTATGTCCTCTATAGATTCTTCTAAGTTTAAACAATATGTACCCATA GACTGTACAGTGGCTATAAACAAAATGTAGCATAATTTTATGCTCTGTTTTTCCCACTTAACTATTACAT ACTTTTCATCTGTCTCCACACGTTTCATGATTTTCATTTTAACAGCTACAAGTTGATATCCCATGATTC ACTTACCAATTTCCCTCTTGTTACCCCTTTGTTTCTAGTTCTTCACTTTTGTAATCAATGCTTCTATAAT TATTTTTCTCATTTGGGATTATTTTCAGAAGGTAAATTAAAAGTAATGGTACTGGCCGGGCACGGTGGCT CCCTGGCCAACATGGGGAAACCGTTTCTACTAAAAATACAAAAATTAGCCAGATGCTGTGGTGCATGCCT GTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCCAGGAGGCAGAAGTTGCAGTGTG TTTTAACTCAAAGAAGATGAACAGCTTATATGTTGACAACTGACCTCCCAAAACATTGAGCCAATTAGAT AGAACTACCAGACATTAGAGTATCTATTTTTCCAGAATGATATTTTTTAATGTAATGTGACAGCTGTTT $\tt CCTCCCTCCCTTCTTTCCTTTCTTTTTTTTTTGACAGTGTCTTACTCTTTGCCCAGGCTGG$ AATGCAGTGGTGCAATCATAGCTCACTGCAGCCTTGAATTCTTGGGCTTAAGAGATATTAGTGCCTCAGC CTCCCAGGTAGCTGGGACTACAGATACACACCACCATGCCCAGCTAGTTTATTTTTTAATTTTTTTAA ATTATTTTGTAGAGACAAGGTGTAACTATGTTGCCCAGGCTGGTCTCAAACTCCTGGCCTCAAGCAATCC ACCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACTCCTGGTCCATAATCTTCACT GAACTGTTTGCTCCTGTCCTTTGGCCATTTTTCCACTGGAATTTTGTGTTTTTACAGACCACTTTAAGGT GGCCCCATGTGGTTTTTCTTCAAAGCAGGTCAGAAGCAGTAAGTTCAAAAAGTGCCAGCACCAGACTCAA ATTTTTACACATTTGACGGCTTTAAATGCAGCCCAAATAAGCATATTTTAATCCATTTAGAGCCTGTCTG AAATCCCAAGCCTCTGCTGCCCTTCGGCGCTCTCTGACCCAGAGACCCTCCACTGTGCTGAGACATCGCT AGACACATAAGTTCCCTCTCCGTTTCTCCTCTCCCCTGGGAGTTCCCTTGCCTTCCCCCCTCTGGGTG GTGGCCTGACCCCCAGTCTATGCCTTAGCCTCTGGAAGGTCTCCTGCAGTAAAGAGCTTCCCTGTCTCTC ACGATCATAATCTTGCCAAAATGCTGCCCAAATAAAGCTTGTTGGGTGCAACTGCCACCTGGTAGTCATG TCTTTTCCTTGAGCAGCCTGGAAATCCTTGAACTCACTACAAGTGGCAATGAAGATGGGATTCTGGTGAT TAAGTGGGTGGGACTCAAAATCTGGACTGCCTCGAGTTGAGTTTAGCATAGCATTGCTCTGTGCTGTATG ACGCTCTATGGCATTCACAGGCTCCCCTGGGCCTCATCAGCCAGGCCAAGCGGCAGTGCCAGTATCTGAG TGAACCTATCCCTTTAGAACTGACTTTTGGGCTGGGCATGATAGCTCACGCCTGTAATCCAGCACTTTGG GAGGCTGACTTGGGTGGATCGCTTGAGCCCAGGAGTTCGAGACCAGCCTGGGCAATATAGTGAGACCTCT CATCTCTACAAAAAAATACAAAAAGTAGCCGGGTGTGGTGGTGCAGGGCTGTAGTCCCAGCTACCCAGGA AGCTGAGGTGGGAGGATCACCTGAGCCCAGGAAGTCGAGGCTGCAATGAGCTATGATTGCTCCACTGCAC GAGATGCACAGAAAAGGAGGCTGGCCTGTCTGTCTGGTTCCTGGATGTTGTTAAGACTATGGGCTTACAT AGAAGGGGAGAATGCACAACTGTGGATCAAAGGCAGGCTTCCCACAACAACATAACAGGCTACAGCAGGA AACGCTCCCTGTGGCAGGGCTAGTGATATGCGAACTCTGAGACAAGAGGGATGTCTTCATCCTGGCAGACA AGCCCATATGATAAAGACAAGTCTGGTCTCCTAAGTGCAGCTGGGAGAGAGGCCTTTGCAAGCAGCTCGC GTGCCCCTGCTCTTGTGACACTCGATTATGCTGTTGCAATGTCATCATTCTAGCCTCTCCCTGGAGGGAT

TAGAAACCCCAACCTTCGGGCTGAGCCGGCAAGCTTTACTCAGAGCGACTAGCGGCAAGGAAGTTTATAT CCCTGCCCTCCCAAGCAAAACCCAGGGCATTCCTAGTAAAATGGTTGCAAAGCCCTTTTATGCTGTATC GAATAAAATAATAGCATTTACTGAGCACTTGTTATATACTTTATATACCTATTTAATCCTGACAAAAATC CTATGAGATAACTTTATATCCTATGACACTGCTTTAAATACCTTATTTAAATCCTGCGACACTACTTTAA ATACCTTATTTAATCCTGACAAAAATCCTATAAGATAACCTACTATATAAGGAAAATGAGGCTGAGAAGT TCACTTCCCGAAGTTCACAGCTAATGTGACAGAGCTGGATTTAGACTCCTAGATTCTGAACACTACTGTC CCCTCAAATAAGATAGTTCCATAAAGCATTTCAAAGAATTACCCTGAGAACTAAAAGCTGAGGCCAAGAT AAATGTAAGGGTCAGAGTAACAGAAAGAAAACAGTGTTGCTTTAAGAGAAATTCACCCAATCTTGGCAG ATGATTGGTGGAGAGCCAAACCATGAACTCTGACTTCTCAGTCTTACCTGGCACCCTACCAGCTGCTGTT CTCCAGCTCGGCCACCTGGGTCTTGCAGGCATGCAGGACTTCTGTGGGCTCCGGCCTAGTTTTCTCCACC $\tt CTGGGCTCCAAACCTCCTTGCGCGTCAGAAGAGTCCAGAGTGTCAGCCTCAATAGGAGGTGTGGTGCCCT$ AAGAGAAATCCAAAGATAAGCCAGGGAGTCCAAAGTTTTCAGACTTGGGCCTGCAAAGACCTGGGAACCT CCACACTCATAGCAACAATCACGTGACCTGGTGCCACAGGTTTCCAAGCAGCCGATCTGCGAGTAAGCAG GTACAGTATTCCCGGGCACAGAGGACGCAAACAGGCTCACAGTTCACTACCCGGTGAGCCCCAGGAGACA GGTGAGAATGTGAGTGACAGGGTGTGTGTGTCCGAAACATTTAAGGGAATTGGCCAGTGTTTAGCGTT ACGTGACACATGATTAAGCAATGCTTACATTGCTGCACACTCTATTCCAACAGAAAAACAAAACAAAACA GAACACGATCTTTACCTCCCAGCAGGGATACAATAAAATATACCACATAATTTTAACTTGACATCTTCTC AATAAAAACAGCTTGAGTCAAGTAATGAACTTCAGTGGGGTAACCTGGAAACTTTTTTCCTATTCCTCAG AAGGAATCCCTAAAATACCTTCCTTCCCCTTCTGCATACTCGAATATGATTGAGTTAAGGACTAGATGCT CACAGTATAAAGAAAGTGTGTGTTCTTTTTTACATTGAAATAACTGGGTTGTTTATCAACTGATTGGA AGTAGTATCGATACTTCTAGAGAAATTCCTTTAGGAATAAGGATTTGTGTTTTGCTGTATAAACCTTTTG CTCTCAAAAAATATTTTATTGATTATGATAAAATACAATGTTTTCTATAAGAGTTTGTTAACGTGTTAGC ATCTAATAATAAATGTAATTCTAGCCAAGTGACAAACTTTGAATGGGAATCGATTGCAAATATATACCC TAACTCAAATGCACATTCTTCAATGTTTACGGAATTTTGTTTAGACATAGAACTTTCAGTGTAAAAGAGC GAACAAAATTGGTAGGTGGTAACAAACACGTGTCAGGCATGAGAATGCTGTTCATTTTCATGCACACTGA TGAGTATTATGAAAGCTGGTCTGGCACAAGTGTCTTGGGTTGTACTTTTTACCTTTCACCATCTATTATC TTCACATACATGTGCTGTTTTCTGCCAAAATGCCATTTCTTCCCTGCCTTCATTAATCTATTATTAATAAT TTTCTTCAAGAATCTTGAAAACCTTCTCAAGGAAACTTTTCCTTGTGTTGTTGTTCTTGAACTTCATA CCTCCCAGGTTCAAGTGATTCTCCTGTCTTGGCCTCCCAAGGAACTGGGATTACAAGCACACCACCAT ACCTGGCTAATTTTGTATTTTTAGTAGAGGCAGGGTTTTGTCATGTTGGCCAGGCTGGTCTTGAACTCCT GGCCTCAAGTGATCCACCCGCCTAGACCTCCCAAAGTGCTGGGATTACAGGCATAAGCCACAGCGCCTGG CCCTGATTTTTTTTTAAAAAAAGCAACAGTTGTGTGATTTTGCTTCCAGACTTCCAGATATCAATTTCTA GTCATCTGATTAATTCCCTTCTAGTTTTCAGATATTGCTATATCTAGTTTTCAGATATTGCTACAGACAA GTCTCTAACTTCTGGGCTCAGGTGATCCTCCTGCCTCGGCCTCTCAAAGTGCTGGGATTACAGGCATGAG CCACCACACCCAGCCCTCCACACACTTTTTTTAATGACAGTATTGAGTTTCTCTGCTTTCTCATGAACTC AAAAGAATCCAAAGGGGAAGAGAAGACAAAAAGAATATTTCCAACCATACAGCTTCAAGAGCTGAGGGTG GCCTGAGGAACCCACTAGAGATCAGTTCACCCACCTCTTTTTAAAGTCTAAGAAATCCAAGTGCACAGAA TGTTCAATCAGCCCACATGCCTCCTTTTTACCATGTTGCTTCTGAGAAGCACCCAAGTTACTAACCCAA GGTCACACAGCTCTGTGATCTTTTAATTCAGAGTTCCCTTGTTTTTTACACAGTAGCATCCCTGTAAAAT ACCTTCTATATGATAGCCCCAAATTCTAAAAGCAAAACTTATTTAAATGGATGTTTTATAATTGTACA TAAAGCATAACTGTAAATTAATAATAGCTAGCCTTTATTGGGCTCTTACCATGAGCAGGCACTGTATGGT CACACAACTAGTAAACAGAATCAAAAGCAATTCCTGCTTTCACTACACTTTGGAATCTACAAGTCCACAT TCTTGATATAATTTCACCAACCTTTTAGTATCCAAGTTAACTTTTCAGTTGGTGAATCACATTGCTTCAC TAAAATGCAAGTTGATTTTCTGGCTATTGCTACATTTCATGCCAAAATAGCAAACCTTTACATTTTCTCC TTAATATTTCAGTCAATTCTACAAATACCTGCATATCTCCCCCACTGCTTATACCTGCATATCTCCCCCA CTGCTTATGAAATGTAAAACTGCATACCTAAAGTACAGTACCTAACTGCACATGAATAAATGAAAAGCAT GCCCCTAGAATGGCATGGTGGTGGTTTACTCTGAGGTCATGCCTAGCTTGATTTCACATTTTCACATTTT TCCATACTAAATATTTATCCTTGGTTGTAATACGGGTCAAGAATGACTCAGAATTTTACTAAAAATTATG CAATTATCATTTGGTCAATACACTTAACCTCTGAAACAAAAGGTTTGTTGAGGCTGATAGAAGGCTGATG ACATTGGCTGCCTGGTTTCTGCAAAGTCCCCACTTTCCTTCTCATTAGTGATGTGCTGTGCCAATGAGAC AGAAATCACTAAAAGGCAGGAAGACAGTCACCAAGAGGTATGGAACTTGGAGCCAGTAAAGGTGTCCCTG AATAATCAGAAGTGGACAAATTCCTCTGTAGTAAAGGGTAACATCTATTTTTCCTGCTCCAAGAATTCC TCACTGGAGCCTAATAGTTCAAAGCTCAGGTTTTAAACTCAGAGTCAGAAAGATCTGGGTTTGAATCCTA GCTTTGCCACTTACTAGCTAAATGACCTTGGGCATCTTACTTCTCTGAGCCTCAGTTTCTCCATCTGTAA AGTGGGGTAACAGTAATATTTATCTCATAGAGCTGTTGTTAATGATTAAAAGAGATAGTATATGTAAAAT $\tt CCCAGTACCTGGCCCATATTAAATGTTCAGTAAGTATTTTGTTATCCTCCTTTTTCTTCCTCCTTCTCTT$ TATTGTCATCATTATCTAGTATCCACATGGCCAGGGAAAAGACCCTAGAGGTTATCCACACCAGCAGAAA CAATATTAAGCAGAATGGCTACTGTAGCTAAAACACCATTGAAGCTACATCTGATTTTTAATTAGATGTC AAAAATAACATTACGGTGGGCAGATGGTTTGAGACCAGGAGTTCGAGACCAGCCTGGGCAACATGGCAGA CACTCCAGCCTGGGTGAAGAGTGAGACCATGTCCCCAGAACAAAACCCAGATTAATTCTGAACAGCAAAA AAACATACTGACTAGGTCAGCAACTTCCTTAGACCTAAGCATTGCCACTGGGTGTAAACCTCTGACATTT TAGAACTCAGTATAAAAGAAGAAAAGAGATGCAATAATTAAACAATAAAAACAGCAAAAACATGCCAATA TCTTTTATAGGAGCTATTTGATGAGACCCTTGGAGCTTTAGGTCCAGCTAAACACCAAAATTAACTTGGG AAATAGTACCCATCCCCCACACCCTGCTGTAAGGCCTTATTGAGAACAACTGAGGTACAAGATTCCAAAT CTCACTGAAATCTCCTCCCCAGGTTCAAGCGATTCTCCTGTCTCAGCCTCTTGAGTAGTTGGGATTAC ${\tt AGGCATGTGCCACCACGCCCGGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCAGCCTGTTGGT}$ CAGGCTGGTCTCAAACTCCTGACATCAGGTGATCCACCTGCATTGGCCTCCCAAAGTGCTGTGATTATAG GCTTGAGCCACCATGCCTGGCCCACTAACTATATTTTTACTCCCTGAATTTTGATTTCTTAATTTGTAAA CATATGGTAGGTATGAACCTACCTTATACAGTCTGAGGGTTAAACAGATAACTATAAATGCCTTTTATGT GAAGTAGTCATCAACAGAAAGACTATTTCATGATGACAAATGGTAAATGAGTGAAAAGCGTCTAATTCTC TATGCCATGCCTATTTTCTTTGTAAATATCTGATGACAAGTCTTCCAGTTCTACAGCTTGACAGCACATA TCTTCATATGTTAAAGTTCACAAGGAACACTTAGCTTGACGTACAAGGTATTGCAGGACACAGAACACTG TTGGTTGGGCCTTAGGGAACATTCTGGGCCTTGCTCAGTGTTTAGTGAGTCTGGTGTGAGGATTTGTGCC ATGGAATTATCAGAGGTGCTTATTTTCCCATATGCTTCCTGTAAAGAAAAGAATCAGAGCTCCAGAAAGG GTCCTGCCCTGGTGCCACATGAATTCTTCTTCTTCTGCGCATGCTCATTTTACAAACTACCTGCTTGCAAAA AAGTCAGATATGGAGAAGTCAGATACGATTAGAAAAAAGTTTGTTCATTAGGGAAAAAATCAGCTTCCCC AAGACTGTCTTTATTTGAAAGACTTGCATTCTCCACACTTCTCTTAATGAGCACATAAACAATCTAG AGAATTACGTACTTAAGTAAATTCTTCCAGAAGTATGCTTTGTCTTGTTGAAGTATTCTTTAAAAGTATG TCCTTATGAAAATTTAAATTACATGGCCAGGTGTGATGTCTCACACCTATAATCCCAGCACTTTGGAAGA CCAAGGCAGAAGAATTGCTTGTGCTCAGGAGTTTGAGACCAGCCTGAGCAACATGGTAAGACCCTGTCTC TATCAAAATAATTAATCAATTAATTATATGATAAAGGCCACATTTCAAAGAGTGGGGAAAAGGTGAATTT ATTCCATTTAGGAACAACTACCAAGGCATTTTATGAAAAATATAAGTAGAATTCTTGTATTACTCCTAAC AATAAATTCTAGTTATGAAAAATATAACTAGAATCCTTGTATCACCCCTAACAATAAATTCTCATTGTAT TCTCAAAGTTATGCCATAAAAATTCTAGGTGTGGGGAAGCATGACAAGAAAGGAAAATAATATTAGTATT GACTACATAAAAAAATAAATATATGCACCACAAAAGATACCATAATCTAAGTTAAAGAGAAATGACAG GGAGGCAGTGGCACGATCTCGGCTCACCACAAGCTCCGCCTCCTGGGTTCACGCCCTTCTCCTGCCTCA GCCTCCCGAGTAGCTGGGACTACAGGCACCCGCCACCACGCCAGCTAATTTTTTGTATTTTTAGTAGAG ATGGGGTTTCACCGTTTTAGCCAGGATGATCTTGATCTCCTGACCTCGTGATCCACTCGCCTCGGCCTCC TTTTTTTTGAGACAGGGCCTCACTCTGTCACCAGGCTGTGGTGCAGTGGTGCAATCTTAGCTTCACTGC ACCGGCTAATTTTGTATTTTTACAGAGACAGGGTTTCACTATGTTGCCCAGGCTGGTCTTGAACTCCTG AGCTCAAGCTGTCCGCCCACCTCAGCCTCCCAAAGTGCTAGGATTACAGGCATGAGACAACTGCACCTAG CCTGGTATAACCTTTCTAGAAGGCAGTTTGAAAATGTGTCTCACATTTTAAATGGATATATACTTTGATT CAGCAATCCTTCTTTTAAGATTAACCAAAGTTAAGCAATGGGAAAATGACATGTACACAAAGAATTAACA CTTGGACAAATTAACCTGAACTCTCTGAAACCTCAGTTACTTCACCTTTAAAATGGGAATAAAACCTATC TTACCTATGCTTGCAATTAAGTGACATATATAAGGCATTTAGCATTTCCTAACAAAATGTTAGTGTCTTT TCAGCTTCTACTGAAAACAGTGACTGTTATCAGAAAGGTATAAACCAAGAATTAAAGGTAGAGATTAGAT ATAATCAAACTCCATGAAGAATTTTAGGCTGAGGTTTCGCATGATTGGTTTTAGGAAAAGTCATCAGTAT TTTATAAGATGTATTAGGAAAAACAATTGGAGACTGTAAACCAATTAGAGGGCTACTCCAAAAGTCCAGG GAAGTAATAAGAATTGCTTGAAATAAGACGATGGCAAAAATAATGGGAGGAGAGGCTGTACACAGTGAAT GGACATCATTGGCCACTGACAGGATGTGACAGGTGAGAGAAATGAGGCACCTAGTAGAACTCCAAAGTTT ATCTCTGAGAAAATAGTGGCACCAACAGCAGACACTGAGAAATTAGTAAGAGGAGCAAGCTTTGAAGGAA AGGTGGTAAAATAGGTTTGAGTTGGAGAAACTCCATCCCAAAAAAGTCTATCACGAGGATAGAAATGTGG AATAGATTTATAGATTTAAGAGAAAAGCCAAGACTAGAGATTTAGTTTGGTAATCACTGGCATAGAGGTG ACCACAGCTCTCAGAGGAAATAAATTGCCCTGAAAGAAAACAGAGAGGCCGGGCGCAGTGGCTCACAC CTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGTGGATCATCTGAGGTCAGGAGTTCAAGACTAGCCTG GCCAACATGGCAAAACTCTGTCTCTACTAAAAACAAAAAAATGAGCCAGGCATGGTGGCGGGCACCTGT AATCCCAGCTGCTCGGGAGGCTGAAGCAGGAGAATCGCTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCT AAGAGAAAACAGGGAGAAGGAGGACAGAACATTGGGGGAATGCCTACCATCACAGACGAAAGAGAAA GAGGGCCAAGAAAAGGAGATGGAGGAGGGACTAGAGGTAGAAGGGACAGGAAGAACAGAATTAAGAAAG TTAAAGGAACACCGCAGTTAAAGAAGGAAGAGGTGGTCACTCCCAGAGAGGTCAATAAGGATTAGGACTA ATAAAAGGGTATTGAATTTGTACTCCAGAAGTCAATGGCAGTTTAAGCATAGCCAGAGGCTGAAACAAGA TTACAAAAGGGGCCGAGGGAGTAGAACACCAAGGAAAGACCTTCAGTAGCAAATGAAAGACGAAGTGTAG TAATTGACATGGGAAGCAGGATCCAGAAATTCAGTTCATTAAAGTACCATACTGAGCTGAGTATAGGATA TAAACGATAAGCTTCTTTCCACTCATGAAATCGTATCAGGTGTATTCATAAAAATGTGCTAAGTCATAAT TGAGGTTCAGAATCCTATTGGAAAACAGGGAAAGAGACAGCAATTTCCTTTGCAGGATGTCAGGAGGTTT GGCATCCCAGGGACCAAAGCCTTCTGTGGAGCTACTGAAGATGCAGGCTGGTTCTGGAACTATCTCTCTG GAAGGAACCTAGCCAGAGGCAGAGACTGACAAGGCAGGTATAGGCAGAGAATGGCGCCAATGATTAAGGA AAGAGTTGGCCTGAGAGCAGGGGGAGGGGTCAGCCCTGGACAGGAGGCAGGAGTGAGAGGTTTATGGATC ACGAGGATGCAGAGATCTTCCGGGAGCAAAGGAAGCACGTAGTTTTCACATAGCCTTACAATGATTTTCT AAAGTGAGACCATTTGAGAGACTGGAAAATATTTAGAATGTCATAAGGAGTAAAAAGACTTAGCGCATCT AACTCCCAAAAGAGTGGCATGTTAATTTACATGCTTTGGTAAAACAGTGCAGTGAAGCTTTTAGCTGCTC TGTTATTAAGTACAAATAGAAATAGAACCAAGCAGGTGCTCATTAAGGCTGTCTTTGCATTTGTGCAAA GGTAATGTGAGAAGCTTTCAAAGATTCACGGTAGCCAAGATAGAGAAGCAACCGAAGTGTCCATCAACTG TCTGTCATTTGTGACAATATGGATGAACCGGAAGACATTATGTTAAATGAAATAAGCCAGGCACAGAATG ATAAATACTGTATGATCTCACTTACATGTGTAATCTAAAAAATATGGACTGCATAGAAGCAGAGAATAGG ATGGTGGTTACCAGGGCTGTTGGGGGGCTGAGAGAGGGCCTGGGGAGATGTTGGTCAAAGGACACAAAATT TCAGTTGAACAGCAGGAATAAGTTCAAGAGAATCTATGTATAACATGGCAATTATAGTTAATAATAATGT ATTGTATACTTAAAAGTTGCTAAGCGACTAGATTTTAGGTGTTCTAATTACTGAAAAGATGACAAATATG TGAGGTAATGCATATGTTAATTAGCTTGATACAGCCATTTCCAACGTATACACATTTCAAAACATGTTGT GGTTCCCTCCCTAAGCATTCCTTTAAACAAAATAGTTCTTTACTATCCTTATTTTTATTCCTGTCTGAGC AAGCAAAGCTAACATAGAAAGTCAGGCAACATGGCGAAACCCCGTCTCTACTACAAATACAAAAATTAGC TGGGCGTGGTGACGTGTGCCTGTAATCCCAGCTACTTGGGAGGCTGAAGCAGGAGAATTGCTTGAACCTA AGAGGCGGAGGTTGCAGTGAGCTGAGATCATACGACTGCACTCCAGTCTGGGCGACAGAGCGAGTCCGTC TCAGGGGTGTAGGGAAAGAAGTCGTGCAGAAAGAGATCCCTGCTCCCCCTGGGCCCTCGTAACCCCTA AGCGTGGCTGATACGCCCAGCATTACCTGAACAATTGTTCCAGAGGATGAGGAAGCTCTGTCTTCTCCA TGTCCTTGTCATGCTTCCAAAGTGAAGACCAAGACTGAGGCGATGGCTCTGCCTTCTCATCTCCATTCTA CGTCTTTTATACCAGACTCAACTTATCAGGCAGTGTAACCACAGCCCTTTATTGCAGTCCTCCCCCATTT TTTTATCTGTATTTTTTTTACTAACTATATCATGTTTACAAATGTGGCTGCTCTTCCTAAAGCCTAGAAA ATACTTTTAAAAGTAGGGGCTCGGCTCACGTCACACAACGGAAATCTTTAAAATGGTGCTTTTAGGAATT TAATCTGCTTTGGTAAATGTAACCTTAAATGGTATCTTTGAGGCCAGGCACTGTGACTCACACCCATAAA ${\tt CCCAGCCCTTTGGGAGGCTGAAGTGGGAGGATCACTTGAGGCCAGGAGTTGGAGGTTGCAGTGAGAACCA}$ GAAAAATTAAAATGCTATCTTTAAAATTACAGCCACGAGTATAAGAAAAATGTTCAACCTCACTAATCA CCAGGGAAATGCAAATTAAAACCACAGTGAGATACTACTTTACACCTGTTAGAATGGCTTATATAAAAAA GATAAAAATGACAAGTGGTCATGAGGATGTGGAGACAACAGAACCCCTGAATACTGTCGGTGGGAATGTA AATTGGTACAGTATCAAAGTTCCTCAAAAAACTAAAAATAGAACCAGCAATCCCACTACTGAGTACATAT CCAAAGGAAAAACTCAGTATGTCAAAGAGATGTCTGCACTCCCATGTTCAATGCAGCACTGTTCACAAC AGGATCTTCTGTTAAGTGAAATAATCCAGGCACAGAAGGACACATACCACATCATCTCCCTTTAATGTGG AATGTAAAAAAAAAAACTCATAGAAGCAGAAAATAAAACAATGGTTACCAGCGACCAGGGATTACAAAA ATGTCTGTCAAAGGACATTAAAAAAAGGGCACAGGAGGAATAAGTTCAAGGGATCTTTTGTATATCATGG ATGGTATGTGAGGTAACATGTATGTTAATTAGCTCAATTTAGCCATTCCACAATGCATATATACATGTAC TTTTTTTTTTTTTTGAGACAGTTTTGCTCTTGTCACCCAGGCTGGAGTGCAACAGCGTGATCTCGGCTCA CTGCAACCTCTGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGA GCGGTGTTTGGTTTTTTGTTCTTGCGATAGTTTACTGAGAATGATGATTTTCAATTTCATCCATGTCCCT ACAAAGGACATGAACTCATCATTTTTTATGGCTGCATAGTATTCCATGGTGTATATGTGCCACATTTTCT TAATCCAGTCTATCATTGTTGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATAATGCCGCAGT AAACATATGTGTGCATGTGTCTTTATAGCAGCATGATTTATAGTCCTTTGGGTATATACCCAGTAATGGG GGGGCAGGGCTAGCATTGGGAGATATACCTAATGCTAGATGACGAGTTAGTGGGTACGGTGCACCAGCAT GGCACATGTATGCATATGTAACTAACCTGCACATTGTGCACATGTACCCTAAAACTTAAAGTATAATAAT ACACTATAAACATCAGCTCAGAAGGAAATACATGTCTCAAATTAACATCGTACTGAAGTCACTCTTTTTG GCCCCTGGTCCCTCCATTATTTTCGTAGTTCTCTCTCTGCCATGAAGGGGTATAATCAGATTGCAAAGTTGT TTGATGGTCACAGAGCACACAGTAAAGTTGTACTCTTCCTTGTCACAGTTCCACCATGTCCCAGCGACAC ACTCTAGGACAAGAGGTCTGCTCTGTGTGAGAGTGGAGCTATTTAACCATCTATAAAATGAGCCCAAAAA GTGTCTGGTGGTTACATGTAAGTCACAAAAATTGTAAGTTGCTTCAATTTTCTTCCTTTTGTCTTAAGAC CCATTGCAACTTATTTTTCAAGTATGAAATGGAAACTGACGTCAGAAAAGACAACTGAAAATGTCTCAT TCAACCAGTTATAATCAAGTAGTACAAATTCTTAGTATTACTTGCTAACACAACTCTTCATGTCATTGGA AATACTGTTTTAGAGCAAAAGAGTAATTGAAATGCGGAAAAATACAGTTCTAAAAATGAGACCAGGAGTG CCAAACAGCATGCTCTCAAAACTTCAGAGAAAGTCCTCAGAAATCAGGATACTACAGAGAACTTCTTCAC CTTCTCCCGTATGCCAACAAGAGTGTCTGAATTACATTCATCTCACTCTTACACAGTGAAGTAGGTTTCC ATACACTTAAACATTAATAACATAAGAGAACTACTTCAATCATACTTTTAAAATATCAACATTAATTTTA AAAATTCTTAGGTTTCCATTCACTTTAAGATCTTTTCATTGACTTCTTTTAGAGATCTGGTTCTAACAAA CTTTAACAAGAAAATCATTTCCCTTACATCGCTCTTCACGGAACTTTCTTCCACCCTCTTCCTCGACTGCT GCCAGGTAAGACATGGAGCCTCTTCTGTTCAACTGAAAGGCACAGCACAAGAATACCTGCAGTCTGCTTG TCAAACCTTAGGTCTTGTTATTTTCATGGCCCCCTGTGCCCCTTCATAAACGATTAAAGAATGTGATTCA TTGATGTGAATGCAGAGAAGACTTAGGCACTGGGCCCTTCTTGAGTCTGCAAAGGGCTGACTTTTCTGTA CGAAGATACTTCAAAGGGAGGCTTGATCCACCTGCCTGTGAAATTTTATAAGCATGTCCTAAAGTAATTC AGGTGTTAAGAATTCTGGGTGGAGTCCAGAACAGGCACACCCTGAGGATTTATATTCACTAGTAAACAAC CTCAGGTTGAGTATTTCCACTTTAAAAAATTCCTTTACTACAGGCCATAGACATAGATGCCACAGGTCGT TCAGGTGGAAAACACTACCCATTAATGCTCTTGTGGAGTGTGGGGCCAGCATTAACCTAAAGTCATACCC ACCTTCCGCTCAGAAGCATCCCTCTCTGCCACTCCACCTTCCTCTGATGTTACAGCTGGCAGCCTATCTC TTTCTACTCCTTCTTGTTCTTGCTTCAAATGCTGGTGAAGGTTTAGTACGGTGGCCTTCAAGTCCACCAA CAGGTCTTCTTTTCTCTGGTTCAAACTCAGAATCTGTTTCTCCATACGTTCGATTTCTCCCTGTGTAGAA AGAGTGTTTGCATAGGTTTGAGAAGTCTGAGGCCTCTGCAGGCCCAGAGCAGCCTGCTTCCTTTGGTACA AGGGCTGAAGATTTTTCTTTGCTATTTGGTTTACAAAGCCAGAAGCTAGTCTCTGGTACGGTATAGCTCC TTTCCATCCTGGATACAATTCCAAAGGTCCTGTGTAGGGTTTATAAGCTATAGGATGCCTCAGCCTTACC AGAGACCTTGTGAATCAGAATCTCTGCGGGTTGAGCCAAAGCATGGAAACTTGTAACATGCTCCACACGT GACTGTGGTGTGCGGCCAGGGTTGGGAGCTACCGCTCTAGTGGCCAGCTACAGGACTGAGAGAACCAGGA TCCACGGGGCAGGCCCCGGAGTCTGCACACTAACCAACACTGCATAAGTGCCTTATGCAGACTTTCCAT TGTGTCCCAAAGCATATTAAAAATGCATGTCCCCAGGAGACATGTTCCCATGTCTCTCCAGGAAATTCTT AAGCAGACTAACATTTGGGAACCACTGAGAGAAAATGAAGACAGAAATCTCATTCTTTATTATCATCTT TACTTTTTCTACAGTAAAATCTTCCTACTAAATAGGAATAGGTAAACAAATAAAGGTACCATGTAGTATA TCTTATTATGGGAATGATGGACAGATGATCTCAAGCTTCGTGATGTTACTTTTAACATTTATATTATTGA TATGTGCAGATCAAATTTCTTATTCATGGCAGATATGCAGATGCCCACTGTATGTCTGAGATGACTATAG GATTATAGATTCTTAGCTTTGGAAGAAACAGCAGGTGACAAATACACTAACATCCTCCTCTCTAGCACCT CTGAGAGATGTCATTCAACTTGCCTGAGCTCCTGAAGTGAGTACTGCATCAGAAGCAGCCTGCTCCTTTT TAGAAAACCTTCATGTGTTTGAAATTTGTTCCTAATATATTCCTTAGACCCCTATTCTTTCCTTGTTATG TCTTCCTTTCTTGCTGTCAGTTCATCCATCCACCCATCCTACAGATAGTCATAGAAGCAATAATTTTCTT TTGTCCAAAGCTGCAACTAGCACACAGCAGAGCACAGGCCTGGGCTTTCTCCTGGCTGTACTGCACACAT TTCTATGCCAATACCCCTATTCTGTCTGAAGTCAAAATTTCTGTGATTGCTTTTGGGAAATAACAACTGT TTGACTTAAATCTGAGTTGGCTGCATTTTGTGTTCCACTTTCAATAAACACTAAACTTCAGAGGTACACT GCCTCCTGACAAGAGCAATACTACAGCCACTAGGATAACACAAACAGAGTAGAGGCACAGTCCTACATGG AGCAGCTGCTCTCAAAGCAGCATCTGCAGACCCCTGGCCACAGTCCATGAGGTCCAGATCATTTTCATAA TACTAAAATGTTATTTGCCTTTTACACCATACTGACATTTGCACTGATGGCATGAAAGCAATGGTGGGTA AAACTACCGGCACCTAATATGAATCAAGGCAGGAACACCAAGTATATTCGTTGTTACTGGGTTCTTCACT TTGATGTATTTATAGTAAAAAAATTCCATTTTCCTTAAGAATGTCCTTGATAAAAATATGTGTCTTAGT GTTCTGGAGACTGGGAAGTCCAGGATCAAAGTATTGGTACGTTTGGTGTCTGGTGAGGGCTGTTCTCTGT TTCCAAGATGGCGCATTGAAGACTACATCTTCCTAAAGGGAGATTTGTCGTGTTCTCACACGGCACAAAG CAGAAGGGCAAAAATGGGTGGACTCCCTCCCTCAAGCCCTTTTCTGAGGGCACCTAATCCCATTCATGAG GGAAGAGCCCTCATGACTCAATCACCTCCCAAAGGCCACACCTCCCGATACTGCTGTTTGGTGATTAAG TTTCAACATGAACAAAAATGTTGGGGGGGGGGGGGGGCAACATTTTTTGGGAGGAAAAAACATTCAAACCA CAAGGGCCAATGGTTGAGAAAAGCACTTATGCTACTGTTTGAGTTGTAAGCTGAACTATCCTTTTTATTC ACAGAACACTATTTTTACGTGAAAAAAGCCAGCTGATAACTGTATTGCTTTCCTTAAATACTAAAAGATT TTTCTGAAGAGATAAGTGTTAATATTAACAACTATGATTTAAAGAATATTAGACAATGTGTCAACATTTG GAAGATCGGCCTAACTCAGCTAATCAGGATTATCCAAGTGATCGAGCGTGATGTATAAAATCATGCATTG TTAGAAGATCCATTCGAAGTACAAAGTAGGCCAGTAAATTTTAATGTAAAAACGTATAAAGTTCATTGAC ATGGGTTTAGATTCCGTTTTACAATTAATACATACTTTGCACTTGTTGGGTTTTAGTATAGTTTCAAAGA AAAATGTCCACAATTATTCAAAAGGACTATTAAAATATTCCTCCATCTTCCAAGTGCATGTCTTTGAGAG GCTGGATTGTCTTCCTATACTTAAAACAAAACTACATGCTTCAGCAGATCAAATGCAGAAACATTTGCAG CACCCACATCTGTCCATTAGGTGGGTGCAAAAGTAATCGCGGTTTTTGTCATTACTTTTAATGGTAAAAA CTGGAATTACTTTTGCACTGACCTAATATTAAGCCAGATATTAAAGAGATTACAAATACATAAAACAATG TCACTCTTCTCATTACTATTTGTTTTAGAAAATATAACTACTTTAAAAAAATGTTACTTCTACTACAGCC TGGGTAACACAGTGAGACCTCATCTCTAAAAAAAAGAAAATAAAATAGTTATTCCTATTAATATGTAGT GGGTTTATTATTGTTGCTTAAAAACTAAATGAATGTTTTTACATTTCTGAGTTTTAATTTAGTTATCAAT GGATATAATTCATATAAACAAAAGCTCTCTGGGGTCCTTGATTTTTTAGCATAAGGGGAAATCTAATATT TTTACAATACTGAGTCTTCATTACTGAGTGGGAATTATTGATCCACCATTTAACAGCTGTGTCATCTTGC ACTCTCCTGTACTTCACTGTAGATGTCAAATCACTTGCCCCAGGTCTCACAGCTGGCGAGTAGTGTAATC AAGACTGAAAAAACCTAGCAACAGATGGTTAACATGCAAACCATTGTAACTGAATCCACAGGACACTGTT TTTTTATTTTTTATTTTTTTAATTTTTTGAGACGGAGTCTCACTCTGTCACCCAGGCTGGAGTGCAGT GGCGCGATCTCGGCTCACTGCAAGCTCTGCCTCCCAGGTTCACTCCATTCTCCTGCCTCAGCCTCCCGAC TCACCGTGTTAGCCAGGATGGTCTCGATCTCCTGACCTTGTGATCTGCCCGCCTCGGCCTCCCAAAGTGC TGGGATTACAGGCGTGAGCCACCGCCCCGGCCCACAGGACACTGTTAATTCTGACATATGGCAATATGT CAGTATGGCAATACTGCTTAGAATATGGAATTCTTCATTACAATAGTATTCAGGGTCTTCACTGCTGAAG CCCAGCCTGCCTACACTGCCTGACTCTATCCCAGAAAGTCAGGTTGTCCAAATATCCTGTGTGTTATATC AGGTTCTTTGGTACCAGAGCAAATTCACATCAAAATGCTTCAAGCTGAGGCCATGGGCACTTAAAAAGCC CTCCATTAAAGAAGGAGATGCGGCAGCCCTGGCTCAGTTTCTGGGATTAGGACTGCCCAGGCTACAAACA GATAAGGCTTCTCTTGATCAAACATCAGGGGCTATAATTTTGTCACTTTTTAGTAATGATAATTATATAA TCATCTATTTTATGAAATAGGGATGGAAAGTAAACACACAGAAATACCTTCAATTGTTACAGAGAAAC GATGGACAAATGAAACATACCTTTATGAATGAAAGAAACATACCTGTAGTTGTGGCAGCTTGTCAGCTTG GTCTGGTGACATATGTTCAAGGGAGAACTGAGCTGAATAATTATTTAAGATCTGTTTCAAATTTTCTATT TCTTCATCCCATTCATTGGTCTGTTTTATGACTACCTATAAAATAACCCCCACAAAAAAAGAATCTTTGTC ${\tt CACCTTTGCTCTTAAGTATTTCTGGTCCAGTGGGTTTATTCTGGAAAGCATTTTATGGCGTGTTAACATA}$ AAGTTGCTAACTTTTGAGAAGTTACTGACAAGTCACATACACCATTTTAATACATATTCCATGGCCGGGG GAGCGGGGGGCTTTCCGCATAGAAAGGTGACATAACAATTCAGACTGAACAGAGCATGTGAGGTCAGTG ATGATGGGTTTTCCCGGTCCAGACTCATCTTCACCTGGTACCCCTTGGGATCAGTGATGTGTTTTACG AGTAAGAGGCTGAGGGTTCAAGAACAGTCTAAATTTGCAGAATAAGAACTAACCAGAACAATACCTGGCA TCTAGTGCTAGGGGAGCAGGAAAGCTCAGACCTATCTGTGGACTAAATAATATGATTAAGCACGATGAAA AACAAAGAAACAGACTTCAAAAGAAAAACTAGATACTTCTTTGGTATGCTACATAATGAAGCAAAATGCC TTTTAAAACTACAAAGTTTCTAGCCAACACGAAATTCTTCCTTGTATTTTCTTTAATATTTAACTATAAT TTTAGCCATAGGCTGGAAATGAATAACTATGTTCACTGTGCACATCTGTTCCCCAGCCCTCAATAATGAA CTACATCCCGTTCTCTCCACAAAAGGAATTTGTCTTATTTTCTACAACGAGGGTACTTACAATATCTAAA GTAGAAATCAAAGGAAATGTACCATATTCTAATGATTGTCTTCACCACTGTCTTCCTTAGCTTTGAAATA TATGAGGGGACATCTGATTGCCACCAGCACAATGAGATGGAAAATTTGAGCAGCATAGTTTGATACCTAA CTTGGCACAAAACAGAACTGCCTCTTCTATTTCACCCATTTCGTCTGTGAAGAAGCCACTTGAAAGCATA GTTAGGACCGTGGCTTTCTTTTTCTGACCAGGAGACTAATAAAGCACAAAAGGATGAAAATAATGGATCA AATTTTATATTTTTTTTCTCTTTATATTATTACAAGGTAGTACATTGAGTGCTAGATCTTTTTTCTCTCTG TAGGTGTTACAGAATGACATCAGTTGACCAGCCAGCCAGACCAGAGAAACTGAGTTAAGACTCAAACCAGA GATTACAGTCTCCTCAAACCTTAGGAGAACAGAGTGGCCACCAAAATGTGCATGAAATTTAAGAGGGAAA AACATATAGTCATTTTTCTTCTTACAACCAGAAGGCGGTCATGAAAAATGAAAAATAACCCTTACAGTGA ${\tt CCCATCTAATCAGGAAAGGCAGCATGCAGGAGGTTGACGGAGACGGTTGGAAGTCTGTGCAGACTTTCTG}$ TCTGGGGAGAAGATGAAGAATATCAGCTCTCAATATGCAGAAATGACACCAGGAGTTTAGAAACTCAAAT TCTTGTTCCATGTGTACATAAATTAACCTCTACACAAGTTAACTCTGTGGTCTTTCAGCAAGTCACTTAA ATGAGAAAATCAATAGGAGAGTCACTGAGATGAACACAGAGATTACTATGGTGATGATTACTTTACAGAT CTGTTGGCCTCAGAGGCTGCAAATGCCTTGTTCAGGTTTGACTCTCTCCCCACAGCATTTTGCCCATGTA GGTCAACAACTGTGGAATGAAATTAAATAGACCATAACTATGCTTTAATGTCTTAAAGGATAAGAACTGA GAAAAATAACCTTAGCTCCATTTGAGCATGAAGATATGCTTTTATATCAAATGCCACCTCCTACAATAAT AGGATAATAATGAATTTCAATTAGAAGTGAAAACCAAACCAGCTTTTGGTGAACATTTTCATCCAGTAAG TTGGATGTCATCAGAAACTGCTTACCTTTAATAACTCATTTTGTTCTTGAGTCACATTTTCCAATAGTTT TATATCTTGTAAAAGCTGATTTGTCCGCTGAAACACAGGCAGAGGTTTCATTCCTGTTTGGGGCAACCTC AGTTCCACTTGGTAAGACACTATCTCAGCAATGGTTTTCTTCATGGGACGTATATTTTCAAGTATGACCT TAATTATAAAGAGGAGCATGTTACAGAAATGAAAAGACAATGGCCACTGTTAAATTTAATTATTCAAAA TTAAAATACAGTATAGTTTTATAGTTTGCATTTTTAAAATAATTTCTTAGCTCAGATTGAAAAGAATTA TTATATCACTCATGATCCGGGAGTTGAAAGTCTCAGGAAAGAATAACTGGGGCAAGAGTAACCTACCAAT GCTGTGTATATTGTCACTAGGCAGTGAGCAATGTAAGGGCAGGTACTGCCTCTCACTTTCGTAGCAACTA CACCTAGCACAGGACTTCCCGTATAGTAGGCCCTCAAAAGTGCTTATTGACTTGAACAGAACTGTGCTGC ATGAGTCCCAGGAGTATAATTATATTTTGCTTTAATAACATCTGATCCATAGAAATCTGGATTTATGTAA CCAATACATTAGAAGAGATTACTCACCGTACTAAGTCATATCTCATATAATATCATTTCATTTAATCCTC ACAACCCCTCGAGAGGTAAGTATCCTAACCTCCATTTCACAGGTGAGGAAATTGGGCTCACAGAAGTTAG AAGATCCAGGTAAGCTTAGTCTGTAAGAGGCAGAGCTGGGAACAGAATCCAGGCCTCCCTAGTCCTAAAC CACATGCTCTCAATCACTAGGCTGAGCAGGGGATCAACATTTGCCTGCTGTTTAGTCATGTCCCAGCTCC TCTGTCAGGGGCTCTATTTACATTACAATTGGCCAATGTAATCTCCTCAGTACCAGTGCACGGATATGAA AGAGAATCCAAAAACCATTAATTACTCAGTCATGCAGCCAGTGAGCAGTCTAGCTGGGGCTGGAACCCAG TTCAGCCTGAATTAGGTGCTCAAGCCCTTGAGTTTGATTTAAATGAAAAAATAACCTATAGGAAAATTAT CTTTACATAGGTGGTACTACAACTACGATTTAAATATACAGTTATAGTTATTCCCATCAATTTCCCAACC TTATTTTGCTATTACTCTGGTAAGACTAAATGCTTTTTTAAATCACATTATATTATATTTTGAAAAAGAC ATAATAAGTATCATAAGAAAATACTTTAAATAATAATCTATGCTTACCTCCCCATGTTTGAGATGTTCTT CAGGTGAAAAATCAAATATTTCTTTTGATAATAGGATAGTTTTGATTTTTGAAACTCTTTTTTCCATTGA ATATTAATCATCTATAAAACAGTTTATTGGCATTAATTTTATTCTCTTATTTAGCCAAATAATGTCTGCC TTTTTTTTTTTTTTTTTTTTTCCTGAGACGGAGTTTCGCTCTTGTTGCCCAGGCTGGAGTGCAATGTC GCGATCTCTGCTCACTGTAACCTCCGCCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAATAG CTGGGATTACAGGCACGTGCCACCATGCCCAGTTAATTTTTATATTTTTAGAGAGACGGAGTTTCGCCA TGTTGGCCAGGCTGGTCTCCAACTCCTGACCGCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGG ATTACAGGTGTGAGCCATCGTTCCTGGCCAGGGACCAACAAACTTTATAAGAAAATGAAGCAGTATGTA CAATAGCTGTTTATAGTGATATCTTCAAATTATGAGGAAAAGTTAAATTACATGGACATTATTCTGTGCA ${\tt CCTACTATTTAAGAAGGTATATAGAATTATACAATGTATTTTAGGGTAATTTTCATCAAACATTATAGAA}$ GCATTTAAAAATTTTGAAATGAGCTTCAGTAACCAAAAATAATTACTTTAACACTTACTATTCCCTGAAG ATACATGAGTGTGGGGTAAGGAATGTAACTGAGTAACAAATGTAAATAATGAAGAACTTTAATTGCCTCT **ACTATGTGACTCTATCTTTAAATAAATGCTTCTGATGTTTCAAGCCAAAATAAAAATCCAGAGGCTGGCA** ATTATCCTTCTGCCTCCGTAAATGCTGGGATTACAGGCGTGAGCCACCGTGCTGGGCACCACGC CCAGCCAGAACTATCTCTTTTAATTCCCTCTTTCCTATCCAGCATTTAAAAATCAGTAGTATTTCTCTTT GACAAAGAGAAAACACTGAGCTTATTTTATCGGGATTCTTTACTCTTTAAAACAGACCACTTCTGGATTG AAAATAAGGAGATGCTTTTTGTTATAGTTACACTACAGGTTGCAAAGTAAAGTAAAATATAATTCCACAA ATGAGAACATACATGACATTTTACCAGATCAATGTGTCTTCACATTGATTAGTTGTATAGTGCTTGGTTA GTAGTATAACTCTAATTTATTTGACAGAATCCTGCTCTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCT TGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTTCCAAGTTGCTGGGAT TACAGGTGTGCACCACGATGCCCAGCTAAATTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGC ${\tt CAGGCTTGTCTTGAACTCCTGACCTCAAGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTGGAATTATAG}$ GCCATTCGCTGAATCTGTGGAAGGCTTTCCATTATTTTTTGTTGTAAAGCTGTTACTTGATTACTTAACT CTTGTATGGATTGGGTTAATTCATCTGTTTCAAAAATTATTGACAGGTCTTCTAGATCCATAAAGATTGA ATGTAAAAGATTGTGCTTCTGTATCTTCCAAAGCCATCTAGATAAACACAGAATGGGAAAAAATAG AGAGAAACATCAAGATCCTGATATAAGCTGATTAATATTTAAATCAGAGAAAATTGAAAGTTATCTCAAC ATTTTAAACTAGTCATTTCTAGTTCGATAATGAAAACAGAACACCCTCTATTGTCAATGACAGTGAAAGA CTTCAGAGTATCTACCTGTATAACTGTAACATAATAAGAAACATAAATATTTGGTCTTGGTCCACTTCTA AAACACTTGGAATCCTTTAATAATAGGGGAGAGAGAGTGTCTTTTATTATACATAATAAGCCCTTTCAT ACATGTAATAACTTTCAAATTTAAGATGTCAAAATAGCTCAGCCACCTAATGAAAATGTTCAGCTTGATA TTCAGTCACAAGTCACTAAAACTAAGTGGGTTATTCAGAATTTTATATTAATCTTATTCAAAATCCTTAT TTATCACTGACAACAGCATCAAAAACCATAAAATACTTAGGAATAAATTTAACAGTATACATGCAAGAAA CACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGCAAAACCCTGTCTCTACTAAAAATACAAA AATTAGCCAGGTGTGGTGGCGGAAGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTT GAACCCAGGAGGCGGAGGCTGCAGTGAGCCATTATTGCACCCCTGCACTCCAGCCTGGGTGACAGAGCAA GACACCATCTCAAAAAAAAAAAAAAAAAAAAAAAAGACCTGCATACTGAAAATCACAAAACATTGTTGAGAA AAATTAAATCCCTAGAGAAATAAAGAGATATACCATGTTCCTGGATTGAATAGTCACTATGGTTGAGATG GAAATTAACAAGCAGATTCTAAGATTTATATCGAAATACAAAGGCCTTGATTTAGCCAAAACAAATCTGA AAAAGGACAAAGTTGTAGAATTGATGCTACCTGATTTCAAGACTTACTGTAAAGCTATAGTAATGAAGAC TGTCATATTGGTGAAAGTATAGACATATAAATTAATTGAACAGAAGGGAGAGCCCAGAAATAGATGCACA TGTATAAGGTCAATTGATTTCCAACAAGTGCCGAAGTAATTTAATGGTGATTGTTATCAATAAATGATG CAGAAACAATTGGATATCCCCATGGAAAAAAAAGAACTTTGATCCTTCAATCACCCTTATGCAACAATTA ACATGAAATGAATCATAGATCTAAGAGAGTTAAGAGTTAAAACTATCAAGTTACTGGAAGAAAACACAGGA AGAAATCTTTGTAACCCTGGGTTAGGTAAGGATTTCTTAGAATGCAACACAAAAGAATAATCCATAAAAG AAAATATTGATACATTGGACCTCATCAAATTAATAACATTTGCTCTCTGAAAGACAGTGTTAAAAGAATG AAAAGACAAGCCGCAGACTGGAAGAAAATATTTTGTAAATGACATATATGTCAAAAGAATGGTTTTCAGAA TAGAGAAAACCTGTTTAAACCACAATGAAATACCACTGCAAGTCACTAAAATGGCTAAAATTTAAAAGGC GGTATTCATACCCTTATATCAGCTTCCTTGAATGCAGGCCAGACTTACTAATTTAATTCTAATAAAATGT GGCAGAAATGATGAGATGTCACTTCCAAGGTTAGATTACAAAGACTGTGGCCCAGCCTGGGCAACAAAGT GAAACCTTTTTGCAAAAATTTAGAAATTAGCCAGGCATGGTTGTGTGCGCCTGTAGTCCCAACTACCTGG GAGGCTAAGGTGGGAGGAACATTTGAACTCAGAAGGTGGAGGCTGCAGTGAGCCGACATTGTGCCACTGC CAGCTCTCTCACTCTCTGGAGATTGTTTATGCTGAGGGAAGCCAGCTGCCATGGTGTGAGGCAGACT CCTGGAGGAGCCCACATGTCTGTAAGTAGAAGCAGATCTTTTGAGGCCTGTCAACAGCCACGGGAATGAG CTTGGAAGCAGATCCCACCTCCTCACACAAGTCGAGCCTTCAGATGAGCCTGCAGCCTTTGTCGAC ACCTTGACTGCATTCTCATGAGAGACCTTGAGCCAGAGATACTTAGCTAAGCCATGCCCATGGACTCCTG ACCCACAGAAACTGTGATAATAAGTTTGTTTCTAAGCTGCTAACTTATGGAGTAATATGTTACACAAA CATTTCCAAACTTATTTCCAAAACTGGAACACTACTTGGCAATCAAATAATTAACTATGCATTAAGTGTA ACAACCTGGATGAATCTCAAAGGCATTATGTTAAGTGAAACAAGTGAGCCACGTAAGACTACATACTGTT

GGTTGAAGACAGGTGAAAGGGGATTGACTGCAAAGAGGCAGGAGGAAACGTCTTGGGAGATGGAGATGTT CCTTATATTGATGGCGGTGGTGGTTACACAACTGCACTTTTATCAAAACTTACCTAACTGCTACTTAAAA TAGGTGTATTAATATTTTTACTGTATGTAAATTATACCTCAATAAATTTGATTTAAAAAAACAGGCCGGGT $\tt GTGGTGGCTCACGCCTGTACTCCCAGCACTTTGGGAGGTCGAGGTGGGCAGATCAGCTGAGGTCAGGAGT$ TCAAGACCAGCCTGGCCAACATGGTGAAATCCTGTCTCTACTAAAAATACAAAATAAGGTCAGCGTGGTG GCACACGCCTGTAATCTCAGCTACTGGGGAAGCTGAGGCAGAAGAATCACTTGAACCTGGGAGGTGGAGG TTGCGGTGAGCCAAGATCGCACCATTGCACTCCAGGCTGGGCAAAAAGAGTGAAACTCCGTCTCAAAAAA TAGTATTTGTGGAATTATCTTTAGGTTACAAAGACCTGTTTTAACAAATGCAATCCAGGTAGAAGGGTAT AGTGCAATTAAAACATTTAAAGCTTAGTTGAGAGTTCTGACACTTCTTTAAAAGTCAATATAAAAA CTAATACCTGAATATGCTAGAAAATGGAAAAGGGCATCCTAAAAGTAAGATTATTGCACAAATGAGGATT TCACATAGGACTAGTTATTTGGGACTTACTTCCCAGGAGGAGATTAGGACACATCGGGACACATAGAAAT AATGTCCTGAAGTTTGAGAGATGCTTTTACATTTTTACATGTGTATCAGTAGAAGGTAGCAAAATCCCAG AAAAAGCATCATTCCTCTCTCTTGTCTTGGTAAAGTCCTCAAAAATAGTGAATCAGGGAGGTGATAAAGA CAAGGGGAAGAAAAGAAAAAAATGGGTAGAAATGCAGCATCTTTACAACTGTTACCGTAAGAAAAAAA TATGCCAACGATTCTCAAACGTCAGGGAGGTCTGAGGTCAGCAGCTCACTTAGGAACACACTGTGCCATT CCAAAGATAAAAAAGGAGCTGAATCACCTTGGAAGTCTGATTCTGTAAACACTGTTACCAAATAAGCTT TTCTCTAAGGGATTCCTTCTCATGGCAGAATAAGAGAGGGGAACACACCTGCGCAATGCAACTTCCCTA GTACTCAGCATCCGGAAGATGTTTTGCAGCCGAGGCCTCAAGTGGGAAAACACTTTCATTTGTTTTGACT TTGTAAGCCAGCATGGACACGTGGGGCATGTGTGGAGTACCAGCAAGGACAGGAAATTTGGAATCATGGT GTGTTAGAAGTGGAAGGAACCATGGGTTCGTTTTCTATTGCTGTGTAACTAATTACCACAAACTTAATGG CTTAAAACAAAACTTATCTCACAGTGTCCAAGGGTAAGGAGTCCAGGCATAGCTGAGGTGAGTCCT CCTTACAGGGAGCCACAAGGATGCAGTCCGGTGCCATCTGGAGCTTGGGGGTTCTCTTTGAAGATCATTCA GGTTGTTGGCAAAATTCAGCTGTAGGACTGGGTTCCCTGTTTCCTTGCTGGCTCTCATTGACTCTCAGCT TCTAGAAAAAGCCTTTGGGCCCTAGCTCCATGGCCCTCTGACAATATAGCCGCTTTCTCAAGAAGAATCT CTCTGCACTCTGCTGCAGGCTGAGTAGCCCTTATCTGAAATGCTTGAGACCAGAAGCATTTCAGATTTTG GACTTTTTCAAATTTTGGAATGTAAGTATTATACTTACCGGTGGAGCATTCCAAATCCCAAAATCCCATA TTAGAGAGCCTTATAATCACGTTAATCAAGTACTTATGGGAGTGACTACCCCATTACCTTAATCATATAA CGTAACCTAGTCAATGAAGGGACTATCCCATCATATTCATATTCCTGCCCACATTCAAGTATTATTCTTT CAGGTCATATACACCAGAGGATGGGAATATTGGGGGGGCATCTTAGAATTCTAACAACCAAAACCATCAGC ACTATCCTATGCACATTCTTTTTTTTTTTTGAGACGGAGTCTTGCTTTGTCGCCCAGGCTGGAGTGCAGT GGTGCGATCTCGGCTCACTGCAAGCTCCGCCTCCTGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGAG TAGCTGGGACTACAGGCGCCCGCCACCGTGCCCAGCTAATTTTTTGTATTTTTAGTAGAGACAGGGTTTC ACCGTGTTAGCCAGGATGGTCTCGATCTCCTAACCTTGTGATCCGCCCACATTCTTATTTCATGGGGAGA AACTGAGGTCCATAGAAGATATACTAAATTATCCAAAAAGTCATAAAGTAGTTATCAGGACAGTAAGAGC GTTAGCGGTAAGGTTGTATTTCAGGAAAGGAGGAAAAAAGCACCAAGACAATCAGCTAAGCCACGAATCT TTATGTAGATGCTATGAGTGGCAGAAAACCTGGAAGAACACTTACCTGCACAGTGCTAGCATGGTGACTC AGTGTCCTCAAAGAGTCATAGTCAGCAGGATTGGCCAGCAAATGACTGGTATTTTCTATCCAAGCCTCAG TGCTCTTCAGAAGGTCACTATATTCCTCCATCTTAACTGTGGCCTGGGAAAGAGATGCAGGACCAAACTT AGTCAGATGCCTTTTACTGGAGCTGAATGACTCCTAGATGAAGAGTCAATAGCTGTTAGTCAGGGGTGTG TCAGGCCTTGCAGATGTCTGCTCCCCATGGCTGGGGCTACTTATTCACCTGCTCTAGGCTATGACACTTC TGACTTTTAAGACTAACTCTGACCATAGGTGGAAAGGATTTAATCAGTTCTACTCCAACGTTATGGGCCT CAGCAAAGTTCTGGGTTAGCCTTGCAAGTATTCTGGTTCTCATTTTATGCTTCATTTTAAAAACTGGACT GTACTTTGTCCTCCTGTTCAGGACCTTGCCCTACAGTTCTTCTAAGACTAGGATGCTGCCTCACTCTTGC TAAATCACAGACAACTCAGCCAACCACAGCTCCTATTTGGAAGGAGGGTAGAGAGGGTATCTTTTCCC CGAATGACAGTCTTTCTCATTGTTGTCTCCCTTACTAGACTCCTGAGACCACCTGCCCTAAATTCCCATT ACTGGTCTTTATCCACCTGTTGGGGAGCCTGGACTTCCCAACAGTTTGCCTGGCTCTTGCTGTTCAAC TCTGAATATTGTTTTGCTTTAACACCATCTCAATACCACCACATGATATGAAGCTATTACGAGTCACA GCCATACCTTATTCAACTGTGAGGTTCTACACTCTGCTCTCTGTGATACTTGCTGATACTGCTGGAAAGG AATCATCAAGTTATCCATCCATTCTTGAGCCTGTCCTGGGTCCTGTTCAACAATGTCCTGAACTTCAGAA TCCAGCTCATTTAGTTTGGAATGCCATAGATCTAACTCGTCCCACATTTTCTGGAGAAGGAAATCGTAAG TCAACTTGAATGAAGAGGTCATAGTTTATGGAGGCAATGCCTGGTTTTCACACAGTATTTACATTTATAA ATGCTACTAAAACATCACAGAAACAACATCACATGAACAGTTGTTAATTTATACCCAGCAATTTGTGATC TAAACTGAAAAACACTTTTCCTGAGCTCTCCTAACTACAACTGTATTCATTTCACTACAAATTAGCTGTA CAAGAGTGACAAGCAAAACATTCTGTTTAAAAAGGGCTTGGGGAAAGACTTGAACCTATTTACACTAGTT TGAAAAAATAAAACAAAGAAAAATATCTGGGCTGGGTGCAGTGGCTCACACAATTTTGGAGGCCAAGGTG TGTGGGCTGCTTGAGGCCAGGAGTTCAAGACCAGCCTGGACAACACAGGGAAACACCGTCTCTACAAAAC TTAGCCAGGTGTAGTGGCGCACACCTGCAGTCTCATCTACTTGGGAGACTGAGGTGGGAGGATCAATTGA GCCAGGGAGGTCAAGGCTGAAGTGAGTTTTGATCACCCCCTGCACTCCAGCTTGGGTGACAGGGTGAGA CCCTATCTCAAAAATTTAAAAAAAGAAAAGAAAATTATCTGCTGACTTGGGATGAATGCAGAGGCAGAAA GCTCTAGAAACATGTATTAGGAGCAACTGCTTTTGACTCAAGAAACCAATAGGTTGGATTCAAATCTGAA CTTCGCTGGGCAGAGAAATTTCAAAGGTAAAATATTCAATTCTTAATGTTTGCTTAAGAACATTTTTT TCCCTATCTTGAGGACTAGGAAAATCTAACTTGTTAAATTAGGTTCCTCTGCTTAAGATTTGTCCAATAG TGAGCCATACTCTGACCTATTTTAAAAGCCCCAAATTATTAAAACATTTCCTTAAGACATAGATTAGAAC AAGAATCCTTTCCCTATGCTGGAGTTTACTTGCGAATTAAGAAGGAGAATAGTGTTTATGTACAGTTTTG TGCAGTCTAAAAAAGGGCTTTAATATTTTTCATATTCTATTGAATGATTTTTAGTATCAGTATCCCCCAAG ATAAGATCCTTACTTTCCTTTACTTGTGAAAATGCTAGTTCACAATCACAGGCTCTCAGAAGTTTGGGTA TATGCCCACCATGGAAAAACAGAATTATTTTTTTGAGACAGAGTCTCACTCTGTCACCCCACACTGGAGTG CAGTGACATGATCTCGGCTCATTGCAACCTCCATCTCCTGGGTTCAAGTGATTTTCGTGCCTCAGCCTCC CGAGTAGCTAGAATTGCAGTCTTGTGCCACCACACCCAGCTAATATTTGTATTTTTAGTAGAGATGGGGT TTTGCCATGTTGGCCAGGCTGGTCTCAAACTCCTAGGCTCAAGTGATCATCCCACCTTGGCCTCCCAAAG $\tt TGCTGGGATTACAGGCGTGGGTCACCGCACCTGGCCAAGAGAATAATTTTTAAATGCAACTTTCCCTATC$ AAGCCTCTCTAGGTGATGCCCCTGTGGATTTGGTTTACAATTTCTGTGCTTCAGATTAATTCAAAGAACT $\tt CACCCTGTGGTGACTGATGAACAAGGCAGGAGTGGGTCAGAAGTACCAAATGCTGAAGGGAGTTAAAGGA$ GGATTTTACCTTTTGAATTTCTTGAGCTTTCTCAATATTTTTTGCTTTTTTCTGCAACATCTTTTCAACA TTATGAAGCCCATTGTTAATTTCTTCTATTTTTCTCCTCATTGCATATGATGGTGAGCTTTTTAAGACTT CATTGCTAATCTGTGAAAGACAAAGACGCATTTGGCTTAGAGAGGTTGTCTGCACTTTATTCATAGGT TCGAACAACAAAGTGGTAGTCACTCTGTTTTAACTTGTAAAAATTTTTTAAGGGCTGGGGGAAGAAATT $\tt CTGGCAAATGCATTAATGAGAAGGTGGATAGGAAGACTAATAAATGGCAGGTGTGTTTACTTCACCTTTT$ TACAGATATATGCTGTGTTGGGCAAAATTACTGAGTGGATTGTGTGAAACATTTCCATATGGATCAAATG GTATTCATTTGGGTGAAACAACCTTCTAAAATTGCCATTTCTTGAGGATGCACAGAGCTTAATTATTCTC GTATCACTTTCCAAATACCTGACTGATGTGTTCTTGTTTTGCTATTTGATAAGGCTTTCTCCAAGCAG TCTATCTGTATAACCATTGAGACTAAAATCATCCTGTGCAGACAGTATACAGATGCTGAAACTGTAACAC AGACTAAATGACTTGCTACAGTCATATGTCAAGGAAGTAGCTGAACTTGTCCCAAGAAGCGCCCCAAGTCC CTAGATTGAGTCCCAGGCTCTATTCACAATATCAGGCCTTGATACTTTTATATCATGTCTTTATTCCCCA GACCATACTGCAGTCAATATTATTAGAAAAAAAAAAATCCCACTTTGGTTCCATATTAGCTTTTCATGGC TGGCTGTGTCACAAATTACCACAAGAAAAGTTTTCTGATATTTTTGAGCACTTATTCTCCTGGCAGAAATG TATACCATTGAGATACATTAGGACAGATCATGATTTAGGAAACATATGTAGCCATTTGAATTATACACAA TGTTACTATGTCTGTCCCCCGGGATCCTTGAACTTCCTTTAGCTGTATCACACAATAAAAATTAGTTGCT GTTTGTTACAAATATAGAGGGTCATAGCGGAAATTTTCTACCTTGAATTTGAACGACTGATTTTGATTAT TAATTTACTCTGCTAGGGATTTTCATAAGTATTCATGAGCATAACATTTAGTTTCTCTCAAAATATTTAG TATTTTCCTGAAATAAATCAATAGTAACGAGATCCTTGAGAAAGTACGAAATAGGTTTTCTTGTGTGTT AACTAAAAAAGATTTGTTATAAATATACGTTAAGAGTTTACATATTTTTTACATGTGAGATTTTCCTGAG AAATCTGTCATAGAATTAATGACATATTCTAGCAACTAAGTTTGAAATCTGAATTTTTTGTGTTTTAAGAT CCAAACAGAATTTTCTTCTGTTTGATATGGGCTGTCTTTCTACAATCTAATCAAAATATCTTGCTAAGCT $\tt CCTATGTTTCTAGTATTATAAAATATTTTCCACCTTTTCTTTAAATCTGGACTTTCAGGTATAAAGATTT$ CTAGTGAGTTGTGAAATTTGTATTCTTATTGCCTTAGTTGTAATGTCAAAATGTTTCAAAGAATGTATTT TAAAGCAAAGTATTAACATCCAAAATGTTCAAGTGGTTGTACAGTGGTTGTACAAAAGCAAACCAAAACCA GTAAAAAATATTATAAACTGTATTATAAAATGCAAGAGAAGAATAAGCATTTTGACAATTAAATACATA TAAATCATCTAATTCTGTTATCTTATGTCACATATTTAGAGCATCTTTATCTTAGCATTCAATAGACACG ATGGTCACTTAACTCTTAAAAGAAGTTATAGCTGAAATCCTGGCAAATGGAATTTGACATTAAATGATAT TTTCCTCTTGATAGTCATTCAGCTCCGTAAATAATAACAGTAGTACAGACATTATTATTACCTTCTCATC TATGTCTTCTAAAGCTTTTCTGCATTCTTCCACCTGGGATTCAATCTCTGCAGGGACTATGGTGTACATT GAAGCTCCTAAAAGCATTAAGAGAGTTGCAATACTCACGAGACTGGGGGAAAAGTTTAATTCTAAAAAGT GAAAGCAGCCTTCCAGCACATCCTTATGATTTAAAGGAGTGCAGTTTGCATGACAAAACCCCACTAGTGA TACAAGCTGATTAAGCCCCAGAGACACTCAGTTTAGTCAGATGATGCTTTCTAATTTGTAAGAATTAAAC TTGATATCTCTTCATAGTGTCACACCATTATCTAGAAAAGACATTACAACACCCCCTGCTTCTAAAGTAC AAAAGTTTCAAAGAAGTTTTTTGTTGTTGTTTTTAACGTGTTGCTATTTCTACTTCCTCCTCCATTATCAT CACAATGATTTAAGGCCACTAAAAGCCCCACACTTGGAGCAGAAGTGTCTACTTTCATGTAATTAGACAG CCCTGCAGAGCTCAACTGCTTTCAAAAGGGAAGGTTCCAGTTCCATACAAAGAATGTAGGTTTTTAGGAG ATAAAAGAAACCTGAACAAATAGTCTATTGGTTGTGGCCTAGAAACCAAATCTGATCTACCTTCTCCTGC AGTAATTATAAAGGAGAAACTCATTTGTATGGGAAAGTTTCCCAAAGATCAAGTGGAAAAATACTTCTTG ACTTGACTGTGGCTTTTTTGTTGTTTTTTTTTTTTACAGTAGCTGTTCAGTAGCATTATTTGTGTTCA ${\tt TGGATTGAGTCACTGTACTGAAGAATGATTACAATTTTAAATGACTCTGTAATGTGTCATTGTTTTCCTT}$ TTCTTAATCCTCAGCAGAGGACAAATCTAGAGAGAGAAAGTTAGAGAACAATGCCATTCAAAGATGGGGT CTTAGAAGGCTTCCCCATGAAGACTGCTTCTTTACTTTCCAATATAATAACCAAAAGTTCTGTTTAGACA GCATGTGACTTTTTTTTTTTTTGAGATGGAGCCAGGCTGGATTGCAGCGGCACGATCTCGGCTTACTACA ACCACCACCTACTGGGTCCAAGTGATTCTCCTGCCTCAGCATCCCAGTAGCTGGGATTATAGGCACACGC TACCATGCCTGGCTAATTTTTGTATTTTTAGTAGAGACGGAGTTTCCCCATGTTGGCCAGGCTGGTCTTG ACCTCCTGACCCCAAGTGATCTGCCTGCCTGGACCTCTCAAAGTGCTGGGATTATAGGTGTGAGCCACCA TGTCCGGCCAACACGTGACTTTTGAATAAACTTCCAAACATACTTTTGGGCTGTCACTATTGGACTGGAA

TGAAAGAGGAGATTCTTCTGAAGAAATGAGATTCCAGATGACCTGTAGGGTGTACATAGACCCTGTCAGA

GACAAGGCGCCATGTCCTACTAAAGGAGTAATGTAACATACTTAAGAGTGGTCTGAGGCCCTTGTTC ACCAAACACACTGGAAACATAGTTGAAAGAAGGCTGCTTGGTCCAGACTGGCCTACCTTCCAGCCTTGTT ${\tt TCAACTCTGTTCTCTGCTCTCCAGCCACACTGATCTTCTCCCTTGGTTCTGCCCATACCATGCCACAGGG}$ CCTTTGCCTATGCCTCTCTCTCTCTCCCCAGACCGCTCCCCCAAACCCAGCCACTGAGTTATCTCTACCC AATTGTTCTGACTTTTCTGGGTGATCCTGGAATGCCATATTTTGGAATGAAGTTGTGGTCTGTTGAAAGA ATTTTCTGAACTTTCTGAAGAGCCTAAAAGAGAACGTCAAAATATAATTGTTTCTTTATCCTGCTCTT CTATGAATAAAATGAAACAGTTTTATTGCAACAATTAATGAAATGCCTGAATAGCTACTAAAGGATGGTT ATTTCCTCTAAGAAAAAAGTAACAATTTTCAATAATGGATGTACCACATATAAAAACAGGTACAAAATC TACCACTTAATCAAAAACCTCTCCAAATCTTTCGCCTCAAATACTCTCTTTTCACACTTTACATTGTAAC TGACATTTCTGTCCTCTTTTTCTCCACGTAATCCTTGAGCTCACATGAAAATGACTTAGAGGTGTGAA TGGAATCACAGGTGGGCTCTTGGGGACAGACAATCCCACTGGGCTTCTTCTCTTAAGCTGACCCATTTTG CTATGGATGCAGCAAATATCAGAAGAGGCACTGAAGTGGGTAAAATCTTTCCTGAGGGTTATTTGGTAAG TATCTATGATATTGTGATATAAATATATTGTTGATCTCTGCTGTAGTTCCTGAGACAGAGCTCTTAA TACCCTTGTAGATAGGAGTGCTAGCTAGGAGAGTCTTTTGTTCTAATACTTGATTTTTTGACCAGTTCCTG ACACAGAGCTCCTAAGCCCTTTGTAATTTCCTGAGTGATAGGAGCATCTTTAGTTCTAAGAAGGCAACTC ${\tt TAGGTGGGATCCTGAGTAGCCTCAGGATGAGGGCTGGTTGCCAGGGGAACCAACTATGTGATTAAAAGGT}$ TGGAACTTTCAGTACCACCCCTACCTCCAACACACCCCCAACCTCTGGGGGAGGGGACAGAAGCTGAA GGGAAGCCCCAGGCCCCTTCCTATACCATGCCTTAGGCACCTCTTCCATCTGGCTGTTTATCTGTATCCT TCATTATATCCTTTATTAATAAACTGGTAAACATGAGTAAAGTGTTTTCTTGAGTTCTGTGAGCCACTCT AGCAAATTAATTGAACCCAAGAAAGGTATCAAAGGATCCCTTGATTTATAGCCTATCAGCCAGAAGTGTA AGTCAGGCGTTCGAGACCACCCTGGGCAACATGGTGAAACCCCTCCTCTACTAAAAATACAAAGAATTAG $\tt CCGGGTGTGGTGCACATGCGTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACTC$ AGGAAGCCGAGTTTGCAGTGAGCCGAGATCATGCTATTGTACTCCAGCCTAGGCGACAGAGCCAAGACTCT GTCTCAAAAAAAAAAAAGGAGAAGTATAGGTAGCAACCTACTACTGATGGCATCTGAAGTAGAGG AATGAATTGGTGTCTGCTGGAGAACTGCCTGATGTGTGGGGAACCCCCATAACCAACATGGTGTCAGAAG TGCTTTGTTGCATGGTGTAAGGGTAGAGAAAAAAACAAGTTTGCTTTTCTTCAGAGCACCTCTAGC CATAAAACTACTATATTCTTTGACCCAGTGATTCTACTTCTCACTATCTTTCTCAATGAATTAGTCACAG AAAGATTCCTTATTAGGGGCTTGGTTTAACACATTATGGCATATCTTCATGGTAGAATATTATACAGCTA GTTACATTTTTTATTTTTTTTTGAGATGGACGTTTCAGGCTGGAGTGCAATGGCATGATCTCAACTC ACTGCAACCTCTACCTCTTGGGTTCAAGTGATTCTCTTCCCTCAGCCTCCTGAGTAGCTGGGATTATAGG CGTGCGCCACCATGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTTACCATGTTGACCAGGC AGCCACCATGCCCGGCCACAGCTAGTTACATTTTAAAAGAACATTTAATGGCATAGGAAGACAAACATGA AATCATAGTAAAAAAGGAGAAAAAATGATTGGCAGTGGTTATTGCTGAGTGGTGACATTAAGGTAGATTT $\tt CCCAGGCTGGAGTGCACGATCTCGGCTCACTGCAAGCTCTGCCTTCTGGGTTCACGCCATTCTC$ CTGCCTCAGCCTCCGAGTAGCTGGGACTACAAGCTCCTGCCACCACACCCGGCTGATTTTTTGTATTTT TAGTAGAGACGGGTTTCACCACGTTAGCCAGGATGGTCTTGATCTCCTGACCTCGTGATCTGCCCGCCT CAGCCTCCCAAAGTGCTGGGATTACAGGAGTGAGCCACCGCGCTCGGCCTGAATTTCCTATAATGAATAT ATTGGAAGGACATTCACCCTCATTAATACCAGGATGGAAAATGTGTGCTTAATTATAGTTACTAATCTGT TCCATCCCTTTTTATACCTATCAGTGTTGTCTCACCTCAATTCTATTGTATCATTTGCCATTATTCTATA CTTTTAGATTTTCTAAATTTTGAGCCATAATTGTCAAGCACATGTCCTTAATAGTTTTTCATAAATCTTA CTTGTTGCATCGTTCTTTCATAGAAGTAATTTCTTGAAATGCTGGAACAGTTTCCACAGCCCCTGAGCTT TCAGGAACATTCTGGATACTTCTGATGCGCTGAAGAAGTAGAGTCAGTAACAGCTGTTGCTTCTCCACGT TCTCTCCATATTGGCATAAACAGTCTAGCAGCTCAGAGAGTTCCTCTGTGGTGGCTGCCTCTTTTGTTTT GGAAATTTCAGGGAGTTCTTCCTGAAGATTATCTAAAATAATTGCCTCTCGTTCAATCTAATTCAAAAAA CAAAAAGAACTAAAATAAGTAAAATATACAATTACATTTCAGGACCTGAAGTAGCCATAATTTTTGTATG $\tt CTCTCTCTAAAGGGTTCCTAGTGCCATATCCTAGTCTGTTTTCCTATAGCTGGGAATATTAATCCTCT$ GCTATCAGAATCCCATAATGCCCAGCTATTGCTCATGTAGATGTGACTGAAATGGAGTACTGCTGTGG TGGGCTGAAGGAAATGCTGTTGAATATCTTCATAAATAATGTATTTCTCCTTCAGATTTCAGATGGATAA AGCAACATTTCTCCTGAGATAAGCACATGAGCTCCACCAAACTGCTTTCACTAAGTGTAAGAGGTTGGGC GTAAGGCCAGCAGGTTCTCATTACCCTGACACAACAAGGTAAAGCAGCCAGAATTACCAAACCAGTG AAGTATTTATCAATAGTGGTGTACACAGAACTCAGAAATACATAACCTATTACATCACATATCTAGAAAC TGGGAGTTCCACCAGCCCTGAACTCAACTAAGATGTAGAAAAAAGTCTCAAAGGCCCCTGAATCAGGTCA TTCTTACGCCTCCCCTCGAATCCCCTGGCCCACCCCTCGGCTGCAGTACTCATTTATCAAATCCTGCCTC ATCACTCCAGTCATCTATGTTTATGATATCATGCTAACTGAAATGGTGAGGACCTGAATGTCCAGTCAGA CATGCCAGAGGCTGAGAAACAAAGCCTGTGAAAATTCAGGAGCCCCAGTATCAGGGGTCTAGTGGCCTGG GGCATGCCAGGACTTCTCCTCTAAGATAAAGGTCAAGTTGTTCAATCTTACAACTCTACCACTAAAAAAG AGACACAGCACTGAACGGACCTTTTGGGGTCTAGGAGGCAGTATATGCTATCCTTGGGATTACTGCTCAG TGGTATAAGCTGCCTGCTGTTTGGGCTGTATGACCCAGTTGGGTACCCAATAACTAGAATACACGGATG CAGATGTAGACTGGCCACTGTCCAAGAGACCTAGGTGTGCGCAATGGGTGCTTCTCATCACCTCAAACCT AAATTCAGTTGAATTAGAAGTCCTAGTTCTTTGCCAGACAGCTACACTTACACCAGGAAATGAGATAAGG GTTCCATTGTATCATTTTCTGTCCCCCTGCTGGAAACTAGCATGCAAATAAAGAAATTGTTACATAGATG GGGGAATTGTACATCTAGGGTTTCCAATGTGCATCAGGGTTGAAAAAACTGTGTCTGTAATCCAGGATTT AATGGGGCACCTCTTGGTGCTTACACACCAGAAACTGGCAGATTTGACTTGATAATAACCAGAAATGGGC AGCTGTAGCAAGCACAATCCAGTAAGAGTAAAAAGAATAAAGGCTCAGACCTTTCCTGTTTCGGCTCCCC TCATCTCCCACTCCTGTTCCCTGGGATCACTTTCCAAAATAAACTACCATTTGCAAGCCTCAGTCCCAAG $\tt CTCTGGTGTCCACTGTGAAGTTGGTAAGTGATTGAGAAGGGGGAATACAAGAGGGAGAACAATCTCTTTT$ TTTTTTTTTTTTTTTTTTTTGAGACGGAGTCTCTCTCTGTCACCCAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACTGTAACCTCCCACGCCCTAGGTTCAAGCAATCCTCTGCCTCAGCCTCCGGAGCAGCGGGGATTAC AGGCTGATCTTGAACTCCTGACCTCGTGATCCACCTGTCTAGGCCACCCAAAGTGCTGGGATTACAGGCG TGAGCCACTGCTCCTGGCCACAATTTTTATTAGGACAATAATTTTACCCCAAAGCCAGGCAATTCTTCAA CTTGGGAATGAATAAACAAACTGAATTCACCCACCCAAAGCAATACTACTCAGGAATAAAGAGAAATGAA CTACTAATACAAGCAGCAGCCAGAATTTCAAGTGCATTATGCTTAGTGAAAAAAAGTAAACTCAAAAGGC CACAAACTGTAAGGAGTCCATGGATATGACATTCTGGAAATGGAAATACTATGAGAACAGAAACAGATTA ${\tt CAGAATTGTCTTAAACCTTGATTTTGCTGGTGATCATGTGACCGTGTGCACTTGTCAGAACAACATATTT}$ TACACTAAAAAGTGTGAAGACAGCCCTAGCATCAGTAAAATAGTTGTCAAAAAAGCCTGTGCATTCACTTT TCCACCTAGAATAGGCTTTGCAATACCTTGATGATTTTCCTTAGACATGGGATCCTAATCAAATTGGTTA TAAAACTTTCAGGTTCACGGTCAATTGTAAAGTCCGGTCTAGAGAGGGGGAGAAGGACCCATAGTTGCATCA GTTGGTGCAAGTGGAAGAGCCGGCCTCACATCTCCAATTATCTTTGACAATGTGACGTTCTTCTAGCAC ATTATGATCATTGAAGCATAAAATGATGATTCTGAATAACACAAGTGAATAGTTATAGTAAAGAGATTCT GTTTAAGAAAACAGGGAGGTAAAATTTTAGGGGGGACACAAGTTCTATCAAAATTTAAATTTAGTTTTTAA TTTGTAAACTTACAAACAGGCATTTAATTTTTAAAAAAAGTCTGCTAATATAAACTTTATTTCATAAACAC TGGATTATTATGTTACTATAGATGACAGGTTTAAAGCAGAAATTCACTTTGTCATATATAAAAGCACCAA TCATGCTAACAGAAGCTTACATGTATGGGCTGTTAGATGATATACTTTTTATTGAATGGATAAAAGCTAC ACTAAAATCTTATATCAATTTGATGTATGTAAATATCATGTAAGTTGACAGATTAATGACTAAGCACCAG CGTCTAAGTTTGAATCCTCTTCTACCCCTTGTGAATTTGAGCAAGTTACTCAGTCTCACTGTGTCTCACT TTCCTCATCTACAAAGTAAGGATAATAAAAATATCCTCACAGAATTCTTGAATAGTGCTCTGAACTATCC GCTTGTGCTACTCTTTGAAAAATATTTTGTTAGCAGATTTTGTCAAATGCTTATGTGAAATAATTAGAAAG TTCTATATGAATGGAGTCTGAATTAATAACACATAATTGTAAATGGGTATATAGCAATAATGTGATAAAA TAAAAGGAGCAAAATCTTAGAATTAGCCCCAGACCTGAATTTGAATAAGAGATGTCCCTCAACAAATATTT ACTAAGTGCCCACTAAGCGCAGGGCCCTAGCCAGGTTCCAAGGTTACAGCAGTGAGCAGGACAGCCCCAG $\tt CCCCAGCCTACAGGGGTTTACAGCTTAATCAATCTCTACCTGGGGACCTTGTGCCACTACTCAATCTATC$ AGTGCTTCAGTTTCCCCATCGATAAAATGGTGATAAAATTTACTTCCCAGGGACAATGCAAAGATTCAGT GAGAACAGGTGTGAACTGCCTTCTCAGCACAGCATAGTAACTCAATAAATGGTACCACTATGGACAGGCA AGCACTGGTGCCAGCAGCCCCAACCAAAAGTGTAATTTACAAAGTTTATTTTAACATTTCAAGAGACTAT TCACTAGTCAGGCCTCACCAGGACCACTGACATAAAATTCATTTTTAAGGATAATAGTTATAAGCAAGAT $\tt CAGTGTCTCACTCTGTTGCCCAGGCTGGAATGCTAGAATACAGTGGCATGATCATGGCTCACTGCAGTCT$ TGACCTCTCATCAAGAGATCCTCCCACCTCAGCCTCCCAAGAAGCTGGGACTACAGGCATGTGCCACCAT ${\tt GCCCAGATTTTTTTTTTTTTTTTTTAGAGATGGGGTTCACTCCATTGCCTGGGCTGTTCTAGAACTCCTG}$ GGCTCAAGCGATTCTCCTGTCTCAGCCTCCCAAAGTGCTGGGATTACATAGGTGAACCACTGCACCCGGC TATCTTTAACTTCTAAATTAATTTTCTTTCTAAATATAGTTCATACCTAAATCCTGAACCAAGGTTAAA TTAACATTTGTGATTGATATATCATGCAGGTTTTGAGACTATTTTCAAAAAGAACATCATAACCTCAT ATATTTTTAGGTCCACATTTAACAATTACAGTTAATTTCCATAGTTGAAAATTATAGATAATTTCAAAAT TATTTGGTGATTACACATATTACCTAATTCTAAACCTTTAGTATAATGTAGAGACAGTTATTTCTGAGAG GGGTTATTTTCACAATAAGATTGTAAAACTCAAACCAGCTAGTAGTCACTTATTAATAAGAATTATCTG CTATCAATAAAGGCACTACTATAAAATAATCTGAATAAGTTCTTGCAGGTTATCTTAATAAGGCCTGACA AAAAACAAGGTGAAAGTAATAAAACAATTTAAATAACATGTTAGAAACTACATGGTTTGTTGAAAATGAA GCACTCACTTCTTCACTGACAAATTTCCATTCCTGCTTCAGTTCTTCGCACCACATCTCCCACTCTTTAG CAGCTTCCAGCAAACTCAGCCATTTCTCCCACAGAGCCGACAATCTTGAGCAAACATATGCCATCATT TTCTGTGCACCTGAGTCTCAAGAGTCTAAGGATCTGTCGTAGTTTCATTAACTCTTTTTGGTTGATATA AAACTTACTAACTCTTTTAAATCCTGAACAATTAATTATTTCAATCTTCCATAAGTATTGCATGATCCAC $\tt CTCTTATCCTTTTAGAAGTCAATTTAGACCAGATGAGAATTATCTATGTATTATTGTATTCTGCATGAAT$ GAGATCAGGAGATCGAGACCATCCTGGCCAACATGTTGAAACCCTATCTCTATTAAAAACACAAAATTTA GCTGGGCATGGTGGCATGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAAGCAGGAGAATTGACTGAACC AGAGTGAGACTCCGTATAAAAAAAAAAAAAAAAAAGTCTATAAGTGGCTGGGCACAGTGGCTCATGCAGCA CTTTGGGAGACTGAGGCAGGAGTTGCTTGAGGCTAGGAATTCAAGACATAGCAAGGCAACATAGCAAG ACCCTGTCTCTACAAAAATTAAAAAATTAACCAGGCATGGTGGTGTATGCCTGTAGCCCCAGCTACTCA ${\tt GCGGGCTGGGATGGGAGGATCCCTTGAGGCCAGGAGCTCAAGGCTGTGATAAGCCATGATTGCACCATTG}$ ${\tt AAGTACAACAGCCCTCATTATCTGGGTTTCTCCTTTCAAGGTTTCAGTTACTTGTGATTAACAACGGTCC}$ TATATAAATATATAAGTGCTATTCTGACTAGTGTGATGAAATCTCAAGCCATCTCTCCCATCCCACCTG GGATACGAATCTTCCCTTTGTCCAGCACATCATGCTGTATATGTTCCCCACCTACGCGTCATTTGGTAGC CTTCTTGGTGATCAGATCAACTGTTGTGGTATCAAATGCTTGTGCTCCAGATGAATAGTAGCCCAACGCT TTCATTTCATCACCCAGGCATTGTATAGTCTCATGTCATTACAAGAAGGGTGAAAACAGTACAATGACAT ATTTTGAGAGAAAGAGACCACATTCACCCAACTTTTATTACAGCATATTGTTATAATTTCTCTGTTATTG TTGTTGACCTCTGACTGCACTTTAATTTATAATTTAAACTTTATCATAGGCGTGTACAGGAAAAAATTA TATACATAGAGTTCAGTGTTATTCACAGTCTCAAGCATCCACTGGGTGTCTTGGAACATATCCCCTGTGG ATAAAGGGGGACTACTGTACATTTTGTTATTTTTAAGTCTCACATTTTACTAAGTAGTTCCTTTGCACAA TTAACTACAGATGATTTAGAAAGTCCTCATCCAAATCCTAATAACATAATACCACAGATTCTAACAGATA AAAATAAGTAAAAGCTCAAATTGCTTTGTAACAGTCTAAGAAGTAACCAGAATTCAGAGCTTATGACAGT TGCAGTAAGCGATCAGTGGACAACAAGGCTCTGTCACTGATCCAGCAGTATCCCTCAAAGTCACATGAGA GGCCAGGCGCAGTGGCTCGCGCCTATAATCCCAGCACTTTGAAAGGCCGAGGCTGGAGGATGGCTTGAAG TCAGGAGTTCAAGAGCCGGTCAACATTGTGAAACCCCGTCTCTACTAAAAATACAAAAATCAGCTG GGCATGGTGGCGGCACTGTAATCCCAGCTACTCAGGAGGCCGAGGAGAATCAAATCACTTGAAGC CGGGAGGTAGAAGCTGCAGTGAGCCAAGACTGCATGACTGCACTCCAGCCTGGGCAAGACTGTGTCTCAA ATATATATAAAACATTACTCTCTGGCTTTCGATTTGAGGAATATTCATGGATATTTAACTCACTGTGAAG ATTTCTACGCGTCTTAACAGGACCACATTCTCTGCTGCCTCTGCCAGTTTGTTCTGCAATTTTTTGCACA CAGACTTACTGGCTAATTGCCAATACTATTACCTTGCTCTGTTCCAAGCGCTCTAAAGCTTCTCTGTAAG ${\tt ACAGTGGCAACGAGGACTGTCCAAGAACTGTCTCCATTTTGCTGAGGTTAGTGTAAATATCCTC}$ ${\tt TTCCATTTTTCTATAGCATTTGTAATTCTCAAGATACCTAGTGAGTCACAGTTAGAAAAAAGTGGTATT$ ATATGACAACTTTCGTTTTTGCTAGGCAATGCATTTTAAAATGTTTTCCAAGAAGTTTTTATTCCCAAAG GGACCTGCATATGGGTTTAAATGCAAACTTGAAAAGGAAGCAAGGGCCGTCCTCTAAAATGAAGATTTTT TTTTTTTAAAGTTCACTTCAGTAAAATGAAAACTGCATTCTCAAACACTGATGAGCTGTAAATTGGTA CAATTCTTGTGGAAAACCACTTAGTCTTAAAACTATTCCCATCTTTGACCCATTAATGCAGCTTCTGCAA TTTACCTTAAGAACTGTATCCTAAACATATAGAGCTTATCCTAAATCTTTTGCACAGTAAAACATCTTTA CTCACTAGACTATTAATTAAAACATCACACATTGGAATACCCTTATCTAACAAAGGTATGATTAAGAAAT TAAAACAATTCATCGTATACAATATTATAGAGTAATTACATTACATTTAGAAAGTATTTGTTACAATCAA AAAACACTAAAATTATGCATACAAAAACAGACACAGCCTAAATCCCCCATTGAATGTAACTAAAAACTCT ATATCAAATTATTCTTAAAAAACAACTCTTAAAACGCATGAATAAATTGACAAGGAATTAGGGAGTCAAA CTGTAAAATGGAAATATACAGAAATAGGCAAAGTTGTAGGACCAGTTTTTTGCCTTGAGGGCACTTGAGT $\tt TTCAATTTCTTTGATTCCTACTGAAAGGTGGGGGACAGACCATAAAGCTGGGAGCCAATCCCAGGATGG$ GTGTCTAATAGAAACTCCCTCTGCAAGAATATTTGTAACACATATAACTATAAAGGACCACTCTCTAAA ATATAGAATTC

AA change Frequency in Liverpool – Liv					of market	number of	In which
Prosition A to G	AA	change	Frequency in Livernool –	Frequency III Liverpool -	individuals	individuals	populations
49671 A to G None 0/92 0/96 7 49904 C to A 0/96 0/96 7 49904 C to A 0/92 0/96 7 49904 GTCCCACATATGG None 0/92 0/96 7 49994 A to T None 0/92 0/96 83980 A to T None 0/92 0/96 83980 CCCTTGAGTTACT None 0/92 0/96 85938 G to A None 0/92 0/96 1 88983 C to T None 1/94 0/92 1 88889 T to C 1/94 0/94 2 90090 T to C 1/94 0/94 2 90090 T to C 1/94 0/94 2 90090 T to C 1/94 0/96 2 90090 T to C 1/94 0/96 2 90090 T to C 1/96 1/96			Blood	Tumor	with change in heterozygosity 1	with a loss of heterozygosity ²	observed populations ³
# 49904 Cro A 11 CCI AI	TYPTY	ē.	0/92	%0 96/0	0	0	3 (C, S)
A to G	INITIO	je.	0/92	96/0	0	0	3 (C, S)
49934 A to G None 0/92 0/94 0/94 4994 A TGTACATACCAT None 90/92 94/96 0 83980 G to A None 0/42 0/52 0 83980 G to A None 26/88 27/94 4 85938 G to A None 16/96 15% 29% 89837 C to T None 1/94 0/92 0/96 89889 T to C CATTGGTAGAAG None 1/94 0/92 90090 T to C None 1/94 0/92 0/96 126711 A to G None 1/94 0/94 0/96 126711 A to G None 1/94 0/96 2/96 154138 G to A Val to Glu 2/96 1/96 2/96 154138 G to A Val to Glu 3/96 2/96 2/96 154431 G to A A to G A to G 3/93 3/96 2/96	ACATATGG		070	0/07	0	0	3 (C)
A to T	ACATACCAT	91	%0 76/0	0%		.	
83980 G to A None 0/42 0/52 0 85938 CTGGAGGTTGAAG None 26/88 27/94 4 85938 G to A None 16/96 13/88 7 89837 C to T None 1/94 0/92 * 90090 T to C None 1/94 0/94 * 90090 T to C None 1/94 0/94 126711 A to G None 1/94 0/94 126711 A to G None 1/94 0/94 130189 G to A None 1/94 0/94 130189 G to A Val to Glu 2/96 1/96 154138 G to A Val to Glu 2/96 1/96 154202 A to G None 3/95 3/96 15431 G to A None 3/96 2/96 154320 A to G A to G 3/96 3/96 160052 A to G	rgagttact	je	90/92 98%	94/96 98%	0	0 (7
85938 G to A None 26/88 27/94 4 89837 C to T None 16/96 13/88 7 * 89889 T to C None 1/94 0/92 15% * 90090 T to C None 1/94 0/96 2/96 * 130189 T to C None 1/94 0/96 2/96 * 130189 G to A None 1/94 0/96 2/96 * 130189 G to A None 1/94 0/96 2/96 * 4 to G AGTCCAGGCTC Val to Glu 2/96 1/96 2/96 * 154138 G to A G to A 3/93 3/96 2/96 1/96 * 154202 A to G A to G None 3/95 2/96 1/96 * 154202 A to G A to G A to G 3/96 2/96 1/96 * 160052 A to G A to G A to G 3/96 2/96 1/96 * 160089 A to G	AGCTTGAAG	Je	0/42 0%	0/52 0%	0	0	3 (5)
* 89837 C to T None 16/96 13/88 * 89889 T to C None 1/94 0/92 2 * 90090 T to C None 1/94 0/94 2 * 90090 T to C None 1/94 0/94 1 26711 A to G None 1/94 0/94 1 26711 A to G None 1/96 2/96 1 26711 A to G None 0/96 2/96 1 26711 A to G None 1/96 2/96 1 26711 A to G None 1/96 2/96 1 30189 G to A 1/96 1/96 2/96 1 54138 G to A None 3/93 3/96 3/96 1 54202 A to G None 3/96 2/96 3/96 1 54431 G to A 3/96 3/96 3/96 3/96 1 60052 A to G ACCCCATAGTAA Ander Carrey 40% 36% 1 60089 A to G		Je	26/88 30%	27/94 29%	4	1	2, 3 (N, C, I, A)
1* 89889 T to C 2* 90090 T to C 2* 90090 T to C 126711 A to G None 1/94 0/94 126711 A to G None 1/94 0/94 130189 G to A None 0/96 2/96 154138 G to A 1/96 1/96 154431 G to A 3/93 3/96 154431 G to A 3/96 2/96 154431 G to A 3/96 3/96 160052 A to G 3/96 3/96 160089 A to G 3/96 3/96 160089 A to G 40% 3/96 160089 A to G 40% 16/96 160165 A to G 40% 16/96 160165 A to G		Je	16/96 17%	13/88 15%	7		2, 3 (C, 1, A, 3)
2* 90090 T to C None 1/94 0/94 126711 A to G CTTTGCTAGACAG None 0/96 2/96 130189 G to A Val to Glu 2/96 1/96 130189 G to A Val to Glu 2/96 1/96 7 154138 G to A 3/93 3/96 8 AGAGCCGGGAA None 3/93 3/96 9 A to G A to G 2/96 2/96 154431 G to A 3/95 2/96 154431 G to A 3/96 3/96 160052 A to G 3/0TR 3/96 3/96 160089 A to G 3/0TR 3/96 3/96 160165 A to G 3/0TR 16/96 16/96 160165 A to G 3/0TR 1/96 16/96 160165 A to G 3/0TR 1/96 8/96	rgttgaacg	ne	1/94 1%	0/92 0%		0	7
126711	GCTAGACAG	ne	1/94 1%	0/94	1	0	7
130189 G to A	CAAGCTGCT	ne	%0 96/0	2/96 2%	2	0	2 1 2 3 (C) 4(Ac)
154138 G to A	GTGCGGCTC	l to Glu	2/96 2%	1/96	(0	public variation
154202	CCGGGGAA	ne	3/93 3%	3%	7		2 3 (C A S) 4
154431 G to A 3' UTR 32/96 35/96 35/96 35/96 36% 3' UTR 38/96 35/96 35/96 35/96 3 UTR 38/96 35/96 35/96 3' UTR 14/96 16/96 16/96 16/96 4 to G 3' UTR 14/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96 16/96	CATAGTAA	ne	3/96 3%	2/96	- 0	0	(As) (As) 1 2 3 (N I A) 4
160052	3'CAGGCTGAA	UTIR	32/96 33%	35/96	7	7	(all)
160089 A to G 3' UTR 14/96 10/96 AAAAATAATTTTA 150165 A to G 3' UTR 9/96 8/96	3'	UTR	38/96 40%	35/96	4		4 (all) 1 2 3 (N.I.A.S)
160165 A to G 3' UTR 9/96 8/96	ATAATTTTA 3'	UTR 	14/96 15%	10/90	t -		1 2 3 (A) 4 (all)
7.0	3,	UTIR	96/6 96/6	8%	I	0	1, 2, 5 (11); (41)

FIGURE 2(a), sheet 1 of 2

Exon			A ANGRAGA		L L A JUNE LE L	number of		
	2	SNF	AA Change	Livernool –	Liverpool -	individuals	individuals	populations
	Position			Blood	Tumor	with change in	with a loss of	observed
						heterozygosity '	heterozygosity -	populations
Exon 9	160376	Cto G	3' UTR	10/96	96/6		0	1, 2, 3 (N,C,A)
		GCTGTGCCTGCCA		10%	%6			
Exon 9	160602	G to C	3' UTR	1/96	1/96	0	0	7
- 484		AGATCAGTTGAGG		1%	1%			(4)0
Exon 10 *	303073	T to C	3' UTR	0/74	0/94	0	0	3(A)
		CTATAGTAATAGG		%0	%0			0 1 11000
Exon 10	302972	G to T	3' UTR	9//9	76/9	-	0_	2,3(N,1,A,S)
		CTGGATGAATCTC		%8	7%			
			OUT TITLE	2/10	21/78		c	2,3(N)
Exon 10	302848	A to G	3, U.I.K	7//5	0///	1	>	
		AACTGGAAGCAAC		7%	9%			0.07(-11)
Exon 10	302689	Tto C	3' UTR	98/6	11/94	3	0	2,3(aii)
		CTTGACTGCATTC		10%	12%			
Exon 10	302671	C to T	3' UTR	98/0	0/94	0	0	(3(A)
_		TGCAGCCTTTGTC		%0	%0			0.07.11
Exon 10	302556	A to G	Met to Val	14/84	14/94	3	0	2,3(aii)
		GCCCACATGTCTG		17%	15%			

- * SNP's observed in 48 breast cancer patients. Genomic DNA was isolated from blood (B; 96 chromosomes) and matched tumor tissue (T; 96 chromosomes)
- 1. For some heterozygosity calculations, individuals 47 and 48 were excluded because it is believed that the blood or the tumor sample was switched. These excluded cases were when both individuals showed a change in heterozygosity.
- minor allele in the same individual's tumor sample. A change from a homozygous genotype of the major allele in the blood sample into a 2. Loss of heterozygosity calculation includes any case where a heterozygous blood genotype became a homozygous genotype of the homozygous genotype of the minor allele in the tumor sample would also be counted
- 3. Populations analyzed:
- 1- cDNA (prostate, Clontech)
- 2- 2-Liverpool clinical
 3- 3- Coriell (N, North Europ.; C, Chinese; I, Indo-Pak; A, Afric-Amer; S, SW Native Amer)
 4- 4-CEPH family (Ca, Caucasian, Af, Afric-Amer, As, Asian)
 - 4-CEPH family (Ca, Caucasian, Af, Afric-Amer, As, Asian)

FIGURE 2(a), sheet 2 of 2

	Contig64	1 6	J	Coriell Frequency/20 chromosomes	ency/20 ch	romosomes		Frequency	Frequency in Liverpool
Exon	rosinon	NN	N. Eur	Chi	In-Pk	Af-Am	SW-NA	Blood	Tumor
Intron 3	126711	AAG	0	0	0	0	0	0	2.1%
5	130189	TAC	0	16.6%	0	0	0	2.3%	1.1%
Intron 7	154202	CGT	0	27.4%	0	7.2%	12.3%	3.5%	2.2%
8	154431	AAG	26.4%	0	28.2%	47.6%	0	31.9%	36.5%
6	160052	AGT	27.6%	0	45.4%	23,25%	35.6%	39.6%	36.5%
6	160089	TGA	13.2%	0	14%	14.4%	28.4%	14.6%	16.7%
6	160165	CGA	0	0	0	10.4%	0	9.4%	8.3%
6	160376	O G C	10%	16.7%	0	27.8	0	10.4%	9.4%

FIGURE 2(b)

	Reference			ر	Coriell Frequency	ý		- Camamaa I	Tichmency in this control
Exon	Number	SNP	N. Eur	Chi	In-Pak	Af. Amer	SW NA	Blood	Tumor
			0/10	1/20	02/0	0/20	3/20	0/92	96/0
Exon -7	49671	TAT	%0	2%	%0	%0	15%	%0	%0
			0//0	1/20	00/0	0/20	3/20	76/0	96/0
Intron —6	49904	ACA	0/10	07/I 2%	%0	%0	15%	%0	%0
			0/0	1/20	00/0	02/0	0/20	0/92	0/94
Intron –6	49934	CAT	0//10	2%5	%0	%0	%0	%0	%0
			19/19	00/00	20/20	20/20	20/20	90/92	94/96
Intron –6	49994	GAG	100%	100%	100%	100%	100%	%86	%86
			0/201	0/20	0/20	0/20	5/20	0/42	0/52
Exon-5	83980	GGT	%0	%0	%0	%0	25%	%0	%0
			6/20	3/20	5/20	9/20	0/20	26/88	27/94
Intron -4	82638	C G T	30%	15%	25%	45%	%0	30%	29%
			0/20	00/1	1/20	2/20	3/20	16/96	13/88
Exon2	89837	ACG	270	2%	2%	10%	15%	17%	15%
			02/0	0/20	0/20	0/20	0/20	1/94	0/92
Exon2	68868	GTT	%0	%0	%0	%0	%0	1%	%0
			02/0	0/20	0/20	0/20	0/20	1/94	0/94
Intron –1	06006	CTA	250	%0	%0	%0	%0	1%	%0
			0/18	0/11	0/18	1/14	0/12	96/6	96/8
Exon 9	160165	CAA	%0	%0	%0	7%	%0	%6	%8
			2/18	2/12	0/18	5/18	0/16	10/96	96/6
Exon 9	160376	OCC	110%	17%	%0	28%	%0	10%	%6
			0/10	000	02/0	0/20	0/14	1/96	1/96
Exon 9	160602	AGT	%0	%0	%0	%0	%0	1%	1%
			0/18	0/18	0/20	1/20	0/18	0/74	0/94
Exon 10	303073	GTA	%0	%0	%0	2%	%0	%0	%0
			1/18	0/18	2/20	1/20	3/20	9//9	6/92
Exon 10	302972	TGA	%9	%0	10%	2%	15%	%8	7%
			2/18	0/20	0/20	0/20	0/20	5/72	8//L
Exon 10	302848	GAA	11%	%0	%0	%0	%0	7%	%6
			3/18	3/20	3/20	9/20	3/20	98/6	11/94
Exon 10	302689	CTG	17%	15%	15%	45%	15%	10%	12%
			0/18	0/20	0/20	3/20	0/20	98/0	0/94
Exon 10	302671	CCT	%0	%0	%0	15%	%0	%0	%0
			3/18	5/20	4/20	8/20	3/20	14/84	14/94
Exon 10	302556	CAT	17%	25%	70%	40%	15%	17%	15%

FIGURE 2(c)

Contig64 position	Exon	SNP	Caucasian	Af-Am Asian	Asian
130189	5	G to A CCAAGTGCGGCTC	0	0	37.5%
152603 (only seen in CEPH)	Intron 7	T to C ATGGGA T TATGTG	0	37.5%	0
154202	Intron 7	A to G GTCCCCATAGTAA	0	0	37.5%
154431	∞	G to A GTCACAGGCTGAA	12.5%	12.5%	12.5%
160052	6	A to G ACTTCAATTTCCC	37.5%	12.5%	37.5%
160165	6	A to G CAATCCAACAATT	25.0%	25.0%	12.5%

FIGURE 2(d)

Exon –7 Forward	ER2-1F	M13f TGTAAAACGACGGCCAGT	CACGCGGGCTTCATAAGCTAGAT
Exon -7 Reverse	ER2-2R	M13r CAGGAAACAGCTATGACC	GGTTGCACCACTCTGTAAATATGCTAAA
Exon –5 Forward	ER2-3F	M13f TGTAAAACGACGGCCAGT	GGCACATAGTAAGCAAATCATAAATGCTGA
Exon -5 Reverse	ER2-3R	M13r CAGGAAACAGCTATGACC	AACCCAGGGCACTGATAGAAGTGAA
Exon —4 Forward	ER2-4F	M13f TGTAAAACGACGGCCAGT	GTCGAAGGGCACACTAGGAAG
Exon -4 Reverse	ER2-4R	MI3r CAGGAAACAGCTATGACC	GACAAATTAATGGTGGCAATCAGGA
Exon –2 Forward	ER2-6F	M13f TGTAAAACGACGGCCAGT	CTTCCTCATCTTCTCACCCACC
Exon -2 Reverse	ER2-6R	M13r CAGGAAACAGCTATGACC	TTCCTCCTTTCCCTCCACTTTTCC
Exon4 Forward	ESR2ix4f35755	M13f TGTAAAACGACGGCCAGT	CTGGAAATGGAGCCTAAAAAGTTTCTGAA
Exon4 Reverse	ESR2ix4r36210	M13r CAGGAAACAGCTATGACC	GATCATGTGTCCAACTCCTTGTCG
Exon5 Forward	ESR2ix5f39066	M13f TGTAAAACGACGGCCAGT	GGTCGTAGTGCTTGACAACTCTAAATGAA
Exon5 Reverse	ESR2ix5r39580	M13r CAGGAAACAGCTATGACC	ATGATGCTATCATCCTCTGCCCTG
Exon8 Forward	ESR2ix8f63153	M13f TGTAAAACGACGGCCAGT	GTGGGACACAGAGCTGACAAGAC
Exon8 Reverse	ESR2ix8r63651	M13r CAGGAAACAGCTATGACC	GGGACCACACAGCAGAAGATGAA
Exon 9 Forward	2ix9f69194		TAACATTTTCACTTCAGTTTCCCTCTGG
Exon Reverse	2ix9r69643		GTCCAGTAGCATTTTACTTTCTACCTAAACAAAG
Exon 9 Forward	2ix9f69494		GAGAAGGGAGGGGACTGGGATTG
Exon 9 Reverse	2ix9r70066		TGTAGGGAATGGCAAAGGCAGCAIGGC
Exon 10 Forward	ER2_10f_146946		GACAGCTCTCTCTCTCTTGGAGAI
Exon 10 Reverse	ER2_10r_147971		CTTCTGCCTCAGCTTCCCCAGTA

FIGURE 2(e)

GACAGCTCTCTCTCACTCTTGGAGAT GTAGCAGTTAGGTAAGTTTTGA CAAACTACTCATTTCCAAAC TACACAACTGCACTTTTATC AGCTCTCTCTCACTCTCTTG ER2_10r_147971 ER2_10sf3 ER2_10sf2 ER2_10sr1 ER2_10sf1 Exon 10 Exon 10 Exon 10 Exon 10 Exon 10

FIGURE 2(f)

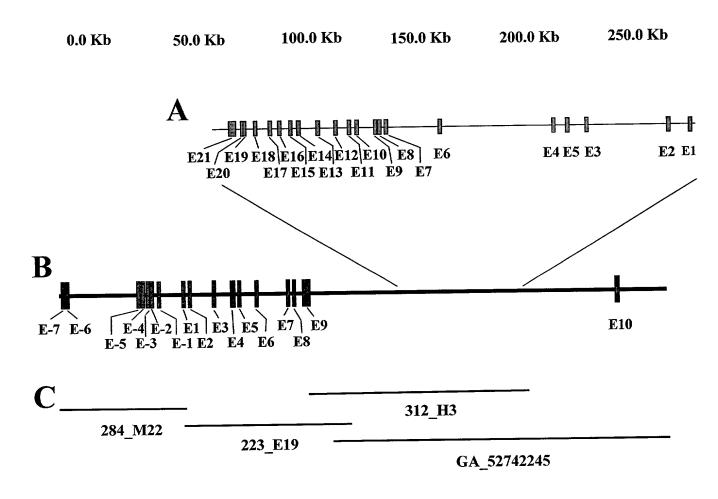
cDNA Sequence for the Estrogen Receptor Beta (GenBank ACCESSION AF051427.1 GI:2970563) (SEQ ID NO:2)

```
tttcagtttc tccagctgct ggctttttgg acacccactc ccccgccagg aggcagttgc 61
aagcgcggag gctgcgagaa ataactgcct cttgaaactt gcagggcgaa gagcaggcgg 121
cgaqcgctgg gccggggagg gaccacccga gctgcgacgg gctctggggc tgcggggcag 181
qqctqqcqcc cqqaqcctqa gctqcaqqaq qtqcqctcqc tttcctcaac aggtqgcggc 241
qqqqcqcqcq ccqqqaqacc ccccctaatg cgqqaaaaagc acgtgtccgc attttagaga 301
aggeaaggee ggtgtgttta tetgeaagee attataettg eecacgaate tttgagaaca 361
ttataatgac ctttgtgcct cttcttgcaa ggtgttttct cagctgttat ctcaagacat 421
qqatataaaa aactcaccat ctaqccttaa ttctccttcc tcctacaact qcaqtcaatc 481
catcttaccc ctgqaqcacq qctccatata cataccttcc tcctatgtag acagccacca 541
tqaatatcca qccatqacat tctataqccc tqctqtqatq aattacaqca ttcccaqcaa 601
tgtcactaac ttggaaggtg ggcctggtcg gcagaccaca agcccaaatg tgttgtggcc 661
aacacctggg cacctttctc ctttagtggt ccatcgccag ttatcacatc tgtatgcgga 721
acctcaaaag agtccctggt gtgaagcaag atcgctagaa cacaccttac ctgtaaacag 781
agagacactg aaaaggaagg ttagtgggaa ccgttgcqcc agccctgtta ctggtccagg 841
ttcaaagagg gatgctcact tctgcgctgt ctgcagcgat tacgcatcgg gatatcacta 901
tggagtctgg tcgtgtgaag gatgtaaggc cttttttaaa agaagcattc aaggacataa 961
tgattatatt tgtccagcta caaatcagtg tacaatcgat aaaaaccggc gcaagagctg 1021
ccaggectge egacttegga agtgttaega agtgggaatg gtgaagtgtg geteeeggag 1081
agagagatgt gggtaccgcc ttgtgcggag acagagaagt gccgacgagc agctgcactg 1141
tgccggcaag gccaagagaa gtggcggcca cgcgccccga gtgcgggagc tgctgctgga 1201
egecetgage ecegageage tagtgeteae eeteetggag getgageege eeeatgtget 1261
gatcageege eccagtgege cetteacega ggeetecatg atgatgteee tgaccaagtt 1321
ggccgacaag gagttggtac acatgatcag ctgggccaag aagattcccg gctttgtgga 1381
gctcagcctg ttcgaccaag tgcggctctt ggagagctgt tggatggagg tgttaatgat 1441
ggggctgatg tggcgctcaa ttgaccaccc cggcaagete atetttgctc cagatettgt 1501
tetggacagg gatgagggga aatgegtaga aggaattetg gaaatetttg acatgeteet 1561
ggcaactact tcaaggtttc gagagttaaa actccaacac aaagaatatc tctgtgtcaa 1621
ggccatgatc etgetcaatt ecagtatgta ecetetggte acagegaece aggatgetga 1681
cagcagcegg aagetggete acttgetgaa egeegtgaee gatgetttgg tttgggtgat 1741
tgccaagage ggcateteet eecageagea atecatgege etggetaace teetgatget 1801
cctgtcccac gtcaggcatg cgagtaacaa gggcatggaa catctgctca acatgaagtg 1861
caaaaatgtq gtcccagtgt atgacctgct gctggagatg ctgaatgccc acgtgcttcg 1921
cgggtgcaag tcctccatca cggggtccga gtgcagcccg gcagaggaca gtaaaagcaa 1981
agagggctcc cagaacccac agtctcagtg a
```

Amino Acid Sequence for the Estrogen Receptor Beta (GenBank ACCESSION AAC05985) (SEQ ID NO:3)

```
mdiknspssl nspssyncsq silplehgsi yipssyvdsh heypamtfys pavmnysips nvtnleggpg rqttspnvlw ptpghlsplv vhrqlshlya epqkspwcea rslehtlpvn gskrdahfca vcsdyasgyh ygvwscegck affkrsiqgh ndyicpatnq ctidknrrks cqacrlrkcy evgmvkcgsr rercgyrlvr rqrsadeqlh cagkakrsgg haprvrelll dalspeqlvl tlleaepphv lisrpsapft easmmmsltk halvdredgkcv egileifdml lattsrfrel klqhkeylcv kamillnssm yplvtatqda dssrklahll navtdalvwv iaksgissqq qsmrlanllm llshvrhasn kgmehllnmk cknvvpvydl llemlnahvl rqckssitgs ecspaedsks kegsgnpgsg
```

Estrogen Receptor Beta



(A) Complete structure of the human synaptic nuclei expressed gene 2 (syne-2) contained within intron 9 of $ER\beta$. Exons are represented by filled boxes and introns by horizontal lines. Note that the gene is on the opposite strand as $ER\beta$. (B) Complete structure of the human estrogen receptor beta $(ER\beta)$. Exons are represented by filled boxes and introns by horizontal lines. (C) Order and names of contigs used to complete the genomic sequence. GA numbers represent Celera contig numbers. Research genetics BAC clones are represented by standard plate and well numbering.

Figure 6, sheet 1 of 2

ESR2 Genomic Structure

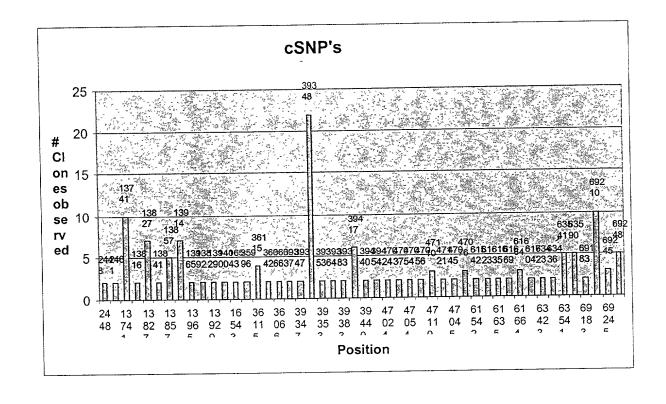
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			A E DE 4 4 2 8	Į,	AE051427	Γ	AF060555	55			AB006589	89			AB006590	069			HSRNAERB	EKB
Splice varient			1 20 1	3	2044	T	2745				3593				1740				1560	
lengtn (pp)			1107		2	T					4976 9762	23			99-1691				19-1452	
CDS			419-1906	9	419-2011		4/1-2012	٦			1210-21	T					Т	Τ	VIV.	
	BAC		CDNA		CDNA		cDNA		BAC		cDNA		ВАС		CDNA				-	
		700	etart	pue	start	end	start	end	start	end	start	end	start	end	start	end	start	end	start	end
(0)000		1	3		1.	10	1				-	1185				1000				×
Exori(s)	- 3				7	230	ľ	280								7				
×.	2320	7647		220	-		-	3			1	1			٥	180	13838	14056	۳	221
×	13605	14056	329	780	329	780	38	832			1180	201			D	2	200			
	16527	1			781	953	833	1005			1638	1810			461	633			777	394
XZ	27760					_	1				1811	1927			634	750			395	511
2 ·	60779		1	1			1	1			1928	2227			751	1050			512	811
*4	50855					1509	1	1			2228	2366			1051	1189			812	950
x2	39317					1					2367				1190	1323			951	1084
9x	4/012	4/145			_1_		l_	4076			2501				1324	1504			1085	1265
×7	61538	61538 61718	1644	1824	1644	1024	0801	0/01				E	10000			4740	COSEE	62650	1266	1560
8×	63365	63551	***		1825	2011						$\simeq 1$	03300	93900	COCI	2		- 83	3	100
6×	69074	69074 69274	1825	2026		₩	:: :		69074	69986	2682	3593					X X			T
Evon(e)?	6	~	v.	3	100		1877-2745	745						*						
1/6) IDV	-		i de la companya de l		-	سنسفيت														

Figure 6, sheet 2 of 2

ESR2 Genomic Structure

			A P.074 E00				AF 074599	66			AF061054	4			AF 061055	<u>۔</u>
Splice varient	ent		ALUTADA 200				1215				629				372	
length (bp)			200				2				7				1-272	
CDS			1-255				1-1148				777-1	Ī			710	
	BAC		CDNA		BAC		cDNA		BAC		cDNA	_	BAC		CUNA	
		end	start	end	start	end	start	end	start	end	start	end	start	end	start	end
Exon(s)?	Γ		* .	2				A				7				
. 4				L				3.3				. V				
					13867			190				: :	 			
LX				ŀ			101	263								
x2							- 2				***************************************			**********		
x3		/: /::		:. :%			364	480					: !			T
x4	36154			79			481	780								
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2 5	: X	61625	219	306			781	961			7	182		61828	2	292
7				122		63618	962	1215								· (
×8						7 : 20 p. cc.	ß		68759	69235	183	629	69103	69182	293	372
ex .					*				* 3	**************************************			3000 A			::: ::::::::::::::::::::::::::::::::::
Exon(s)?								1								

Figure 7



	Γ	exc	n -7	exo	n -7	exo		exo	1	ехо	- 1		n -5		n -4	exo	1
	L	49	904	499		499		496		839			938	898	337 A	A A	G
		T	С	С	Α	G	A	Α	T	G	Α 0.05	A 0.77	G 0.23	G 0.93	0.07	$\frac{1}{1}$	0
total	total	0.96	0.041	0.96	0.04	0.99	0.01	1	0	0.95	0.05	0.77					0
N.Eur	N. Eur	1	0	1	0	1	0	1	0	1	L _o	0.7	0.3	2	0	1 2	0
a01	GM03715	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	0	0 2	2 0	2	ő	2	ő
a02	GM06816	2	0	2	0	2	0	2 2	0	2	ő	2	ŏ	2	ő	2	ŏ
a03	GM10923	2	0	2	0	2	0	2	0	2	ŏ	1	1	2	0	2	0
a04	GM10924	2	0	2	0	2	0	2	0	2	ŏ	2	0	2	0	2	0
a05	GM11814	2	0	2	0	2	ő	2	0	2	ō	1	1	2	0	2	0
a06 a07	GM12136 GM12137	2	0	2	0	2	Ö	2	ō	2	0	2	0	2	0	2	0
a07	GM12547	2	ő	2	0	2	0	2	0	2	0	1	1	2	0	2	0
a00	GM12548	2	ō	2	0	2	0	2	0	2	0	1	1	2	0	2	0
a10	GM14667	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Chi	Chi	0.95	0.05	0.95	0.05	0.95	0.05	1	0	1	0	0.85	0.15	0.95	0.05	1	0
b01	GM00576	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b02	GM03433	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
b03	GM06090	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b04	GM07426	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b05	GM09820	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b06	GM11321	1	1	1	1	2	0	2	0	2 2	0	2	0	2	0	2	0
b07	GM11322	2	0	2 2	0	2 1	1	2	0	2	0	2	0	2	0	2	0
b08	GM11323	2	0 0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b09	GM11324 GM11325	2	0	2	0	2	0	2	Ō	2	0	1	1	2	0	2	0
b10 In Pak	in. Pak	1	0	1	0	1	0	1	0	1	Ô	0.75	0.25	0.95	0.05	1	0
c01	GM01032	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c01	GM01032 GM01225	2	ō	2	0	2	0	2	0	2	0	1	1	2	0	2	0
c03	GM04300	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0
c04	GM07895	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c05	GM10176	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
c06	GM10666	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c07	GM10667	2	0	2	0	2	0	2	0	2	0	1	1 0	2	0 1	2	0
c08	GM11213	2	0	2	0	2	0	2	0	2 2	0	2 2	0	2	0	2	0
c09	GM11860	2	0	2	0	2 2	0	2 2	0	2	0	2	0	2	0	2	ŏ
c10	GM14611	2	0	1	0	1	0	1	Τö	1 1	T 0	0.55		0.9	0.1	1	T 0
Af. Amer	Af. Amer	1	0	2	0	1 2	0	2	0	2	0	1	1	1	1	2	0
d01	GM14660 GM14661	2 2	0	2	0	2	0	2	0	2	0	2	Ö	1	1	2	0
d02 d03	GM14663	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
d03	GM14665	2	ō	2	0	2	0	2	0	2	0	1	1	2	0	2	0
d05	GM14672	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
d06	GM14682	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0
d07	GM14683	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
d08	GM14696	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2 2	0
d09	GM14698	2	0	2	0	2	0	2	0	2	0	1	1 1	2 2	0	2	0
d10	GM14700	2	0	2	0	2	0	2	0	2	0		10	0.8			1 0
Nat. Amer		_		_			0	1 2	0	0.7	5 0.25 1	2		2	0.10	2	 0
e01	GM12060	2	0	2	0	2	0	2	0		1	2		2	0	2	0
e02	GM12061	2	0	2 2	0	2 2	0	2	0	2	0	2		2	0	2	0
e03	GM12062	2 2	0	2	0	2	0	2	0	2	0	2		1	1	2	Ō
e04 e05	GM12063 GM12064	2	0	2	0	2	0	2	0	2	0	2		1	1	2	0
e05 e06	GM14308	1	1	1	1	2	0	2	0	1	1	2		2	0	2	0
e00 e07	GM14309	2	0	2	0	2	0	2	0	2	0	2	0	2		2	0
e08	GM12310	1	1	1	1	2	0	2	0	2	0	2		2		2	0
e09	GM14311	2	0	2	0	2	0	2	0	1	1	2		1		2	
e10	GM14313	1	1	1	1	2	0	2	0	1	1	2	0	2	0	2	0

1	exo	n -2	exc	n 9	exc	n 9	exc	n 9	exo	n 10	exo	n 10	exor	1 10	exo	n 10	exo	n 10	exo	n 10
i	900	1	į .	165	160	376		602	303	073	302	972	302	848	302	699	302	681	302	556
	Α	G	Α	G	С	G	G	С	T	С	G	T	Ā	G	Т	C	С	Ŧ	Α	G
total	1	0	0.99	0.01	0.89	0.11	1	0	0.99	0.01	0.93	0.07	0.98	0.02	0.79	0.21	0.97	0.03	0.77	0.23
N.Eur	1	0	1	0	0.89	0.11	1	0	1.00	0.00	0.94	0.06	0.89	0.11	0.83	0.17	1.00	0.00	0.83	0.17
a01	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0	2	0	2	0	2	0
a02	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
a03	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
a04	2	0	1	n/a	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1
a05	2	0	2	0	2	0	2	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
a06	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
a07	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0	2	0	2	0
a08	2	0	1	n/a	1	1	2	0	2	0	2	0	2	0	1	1	2	0	1	1
a09	2	0	2	0	1	1	2	0	2	0	1	1	2	0	1	1	2	0	1	1
a10	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Chi b01	1	0	1	0	0.83	0.17	1	0	1	0	1.00	0.00	1.00	0.00	0.85	0.15	1.00	0.00	0.75	0.25
b01 b02	2	0	n/a 2	n/a 0	n/a 2	n/a 0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b02	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	o
b03	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
b05	2	0	n/a	n/a	n/a	n/a	2	ő	2	0	2	0	2	0	2	0	2	0	2	0
b06	2	0	n/a	n/a	n/a	n/a	2	0	2	0	2	0	2	0	1	1	2	0	1	1
b07	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	1	1
b08	2	0	n/a	n/a	n/a	n/a	2	0	n/a	n/a	n/a	n/a	2	0	1	1	2	0	1	1
b09	2	0	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1
b10	2	0	1	n/a	0	2	2	0	2	0	2	0	2	0	2	0	2	0	2	0
In Pak	1	0	1	0	1	0	1	0	1	0	0.90	0.10	1.00	0.00	0.85	0.15	1.00	0.00	0.80	0.20
c01	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c02	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c03	2	0	2	0	2	0	2	0	2	0	2	0	2 2	0	1 2	1	2	0	1 2	1
c04 c05	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c06	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c07	2	0	2	0	2	ő	2	Ö	2	ő	2	0	2	0	1	1	2	0	1	1
c08	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
c09	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0	1	1
c10	2	0	n/a	n/a	n/a	n/a	2	0	2	0	1	1	2	0	1	1	2	0	1	1
Af. Amer	1	0	0.93	0.07	0.72	0.28	1	0	0.95	0.05	0.95	0.05	1	0	0.55	0.45	0.85	0.15	0.6	0.4
d01	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
d02	2	0	2	0	2	0	2	0	2	0	2	0	2	0	1	1	1	1	1	1
d03	2	0	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1
d04 d05	2	0	n/a 2	n/a 0	2 2	0	2	0	2	0	2	0	2 2	0	2	0 1	2	0 0	2	0
d06	2	0	2	0	1	1	2	0	2	0	1	1	2	0	1	1	2	0	1	1
d07	2	0	1	n/a	1	1	2	0	2	0	2	0	2	0	2	0	2	0	2	ò
d08	2	0	n/a	n/a	n/a	n/a	2	0	2	0	2	0	2	0	1	1	2	0	1	1
d09	2	0	1	n/a	1	1	2	o I	1	1	2	0	2	ō	0	2	1	1	1	1
d10	2	0	1	1	0	2	2	0	2	0	2	0	2	0	0	2	1	1	0	2
Nat. Amer	1	0	1	0	1	0	1	0	1	0	0.85	0.15	1	0	0.85	0.15	1	0	0.85	0.15
e01	2	0	2	0	2	Ö	n/a	n/a	2	0	1	1	2	0	1	1	2	0	1	1
e02	2	0	n/a	n/a	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
e03	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
e04	2	0	n/a	n/a	2	0	2	0	2	0	1	1	2	0	1	1	2	0	1	1
e05	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1	2	0	1	1
e06	2 2	0	2 2	0	2 2	0	2	0	2	0	2	0	2	0	2 2	0	2 2	0	2	0
e07 e08	2	0	2	0	2	0	2	0 0	2	0	2 2	0	2 2	0	2	0	2	0	2	0
e08 e09	2	0	n/a	n/a	n/a	n/a	n/a	n/a	2	0	2	0	2	0	2	0	2	0	2	0
e10	2	ō	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	0	2	0	2	Ö	2	0	2	ő

	exo 499	n -7 904	exo: 499		exo 499		exo 496		exo 839		exo 859	n -4 938	exo 898	n -2 337	exo 898		exo 900	
	Α	G	С	Α	Α	G	Α	Т	G	Α	G	Α	С	T	T	С	T	C
	1.00	0.00	1.00	0.00	1.00	0.00	0.98	0.02	1.00	0.00	0.71	0.29	0.85	0.15	1.00	0.00	1.00	0.00
T1	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	Ö
T2	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T3	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T4	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T5	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0	2	0	2 2	0
T6	2	0	2	0	2 2	0	2	0	2	0	2	0	n/a 1	n/a 1	2	0	2	0
T7 T8	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	ő	2	0
T9	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	o	2	0
T10	2	ő	2	0	2	ő	2	o	n/a	n/a	1	1	2	o l	2	ő	2	0
T11	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	Ö	2	0	2	0
T12	2	0	2	ō	2	ō	2	0	n/a	n/a	1	1	1	1	2	0	2	0
T13	2	0	2	0	2	0	2	0	n/a	n/a	1	1	1	1	2	0	2	0
T14	2	0	2	0	2	0	2	0	n/a	n/a	0	2	2	0	2	0	2	0
T15	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
T16	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
T17	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T18	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0
T19 T20	2	0	2	0	2	0	2	0	n/a 2	n/a 0	2	0 2	2	0	2	0	2 n/a	0 n/a
T21	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
T22	2	0	2	0	2	0	0	2	2	0	2	Ö	2	0	2	0	2	ŏ
T23	2	0	2	0	2	ō	2	0	2	0	2	0	n/a	n/a	n/a	n/a	2	ő
T24	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	ō
T25	2	0	2	0	2	0	2	0	2	٥	0	2	n/a	n/a	2	0	2	0
T26	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T27	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T28	2	0	2	0	2	0	2	0	n/a	n/a	0	2	2	0	2	0	2	0
T29	2	0	2	0	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0
T30	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	<u>°</u>
T31 T32	2 2	0	2 2	0	2	0	2	0	n/a 2	n/a 0	1 2	1 0	2	0	n/a 2	n/a 0	2	0
T33	2	0	2	0	2	0	2	0	∠ n/a	n/a	1	1	2	0	2	0	2	ő
T34	2	0	2	0	2	0	2	0	n/a	n/a	2	Ö	2	0	2	0	2	ő
T35	2	0	2	Ö	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	ŏ
T36	2	0	2	0	2	0	2	0	n/a	n/a	2	0	1	1	2	0	2	0
T37	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
T38	2	0	2	0	2	0	2	0	n/a	n/a	0	2	2	0	2	0	2	0
T39	2	0	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0
T40	2	0	2	0	2	0	2	0	n/a	n/a	1	1	1	1	2	0	2	0
T41	2	0	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0
T42 T43	2	0	2	0	2	0	2	0	n/a 2	n/a	2	0	2	0	2	0	2 2	0
T44	2 2	0	2	0	2 2	0	2 2	0	n/a	0 n/a	2 2	0	1 2	1 0	2	0	2	0
T45	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T46	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
T47	2	0	2	ō	2	0	2	ō	n/a	n/a	2	0	2	0	2	0	2	ő
T48	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0

	intro	3	exo 130	n 5 189	intro	on 7 138		on 7 202	1	on 8 431		on 9 1052		on 9 089	exc 160	n 9 165		on 9 376
	Α	G	G	Α	G	Α	Ā	G	G	Α	Α	G	Α	G	Α	G	С	G
	0.98	0.02	0.99	0.01	0.97	0.03	0.98	0.02	0.64	0.36	0.64	0.36	0.83	0.17	0.92	0.08	0.91	0.09
T1	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T2	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
T3	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1	2	0
T4	2	0	2	0	1	1	2	0	1	1	1	1	2	0	2	0	2	0
T5 T6	2	0	2	0	2	0	2	0	2	0 1	0 2	2	2 0	0 2	2 2	0	2	0
T7	2	0	2	0	1	1	2	0	1	1	2	0	1	1	2	0	2	Ö
Т8	2	ō	2	0	2	0	2	0	2	0	2	0	0	2	2	ő	2	ŏ
Т9	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T10	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
T11	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
T12	2	0	2	0	2	0	1	1	2	0	1	1	2	0	2	0	2	0
T13	2	0	2	0	2	0	2	0	2	0	2	0	1	1	1	1	1	1
T14 T15	2 2	0	2	0	2 2	0	2	0	1	1 2	1 2	1 0	2	0	2 2	0	2	0
T16	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
T17	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	ő
T18	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T19	2	0	2	0	1	1	2	0	1	1	1	1	2	0	2	0	2	0
T20	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
T21	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T22	2	0	2	0	2	0	2	0	2	0	2	0	2	0	0	2	0	2
T23 T24	2 2	0	2 2	0	2 2	0	2	0	2	0	0	2 0	2	0 0	2	0	2	0
T25	2	0	2	0	2	0	2	0	0	0 2	2	0	2	0	0 2	2	0 2	2
T26	1	1	2	0	2	0	2	0	1	1	1	1	2	ō	2	0	2	ŏ
T27	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	ō
T28	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
T29	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T30	1	1	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T31	2 2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T33	2	0	2	0	2	0	2	0	2	0 1	1	1	1 2	1 0	2	0	2	0
T34	2	0	2	0	2	0	2	0	ò	2	2	Ó	2	0	2	0	2	o
T35	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	ŏ
T36	2	0	2	0	2	0	2	0	1	1	2	0	1	1	2	0	2	0
T37	2	0	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0
T38	2	0	2	0	2	0	2	0	1	1	2	0	2	0	1	1	1	1
T39	2	0	2	0	2	0	2	0	2	0	2	0	1	1	1	1	1	1
T40 T41	2	0	2	0	2	0	2	0	2	1	2	0	0	2	2	0	2	<u>°</u>
T42	2	0	2	0	2	0	2	0	2	0	2 1	0	2	0	2 2	0	2	0
T43	2	0	2	0	2	0	2	0	2	0	1	1	0	2	2	0	2	Ö
T44	2	0	1	1	2	0	1	1	2	ō	1	1	2	0	2	0	0	2
T45	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
T46	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T47	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
T48	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0

	exo 160		exo 303			n 10 972		n 10 848		n 10 699		n 10 681		n 10 556
	G	С	T	С	G	T	Α	G	T	С	С	Ť	Α	G
	0.99	0.01	1.00	0.00	0.93	0.07	0.91	0.09	0.88	0.12	1.00	0.00	0.85	0.15
T1	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T2	2	0	2	0	2	0	1	1	2	0	2	0	2	0
Т3	2	0	2	0	2	0	2	0	1	1	2	0	1	1
T4	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T5	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Т6	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T7	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T8	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Т9	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T10	2	0	2	0	1	1	2	0	1	1	2	0	1	1
T11	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T12	2	0	2	0	1	1	2	0	1	1	2	0	1	1
T13	1	1	2	0	2	0	2	0	1	1	2	0	1	1
T14	2	0	2	0	1	1	2	0	1	1	2	0	1	1
T15	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T16	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T17	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T18	2	0	2	0	2	0	n/a	n/a	2	0	2	0	1	1
T19	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0
T20	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T21	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0
T22	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0
T23	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T24 T25	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0
T26	2	0	2	0	2	0	2	0 1	2	0	2	0	2	0
T27	2	0	2	0	2	0	1 2	0	2	0	2	0	2	0
T28	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T29	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T30	2	0	2	0	1	1	2	0	1	1	2	0	1	1
T31	2	0	2	0	2	0	2	0	1	1	2	0	1	1
T32	2	0	2	0	2	0	2	0	2	Ö	2	0	2	ö
T33	2	0	2	0	2	ō	1	1	2	ō	2	ō	2	ō
T34	2	0	2	0	2	0	1	1	2	0	2	0	2	0
T35	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T36	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T37	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T38	2	0	2	0	2	0	2	0	1	1	2	0	1	1
T39	2	٥	2	0	2	0	1	1	1	1	2	0	1	1
T40	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T41	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T42	2	0	2	0	1	1	2	0	2	0	2	0	1	1
T43	2	0	2	0	1	1	2	0	1	1	2	0	1	1
T44	2	0	2	0	n/a	n/a	n/a	n/a	2	0	2	0	1	1
T45	2	0	2	0	2	0	n/a	n/a	1	1	2	0	1	1
T46	2	0	2	0	2	0	2	0	2	0	2	0	2	0
T47	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0
T48	2	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	exo 499		exo	n -7 934		n -7 994	•	n -7 671		n -5 980	ł	n -4 938	•	n -2 837	1	n -2 889		n -2 090
1	A	G	C	A	A	G	A	T	G	Э00 А	G	936 A	C	337 T	T	C	90. T	C C
l	96	0	96	0	94	0	94	2	52	0	67	27	75	13	92	0	94	0
	1.00	0.00	1.00	0.00	1.00	0.00	0.98	0.02	1.00	0.00	0.70	0.30	0.83	0.17	0.99	0.01	0.99	0.01
B1	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
B2	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0
В3	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
B4	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0
B5	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0
B6	2	0	2	0	2	0	2	0	n/a	n/a	1	1	1	1	2	0	2	0
B7 B8	2	0	2	0	2	0	2	0	n/a	n/a	2	0	1	1	2	0	2	0
B9	2	0	2 2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
B10	2	0	2	0	2	0	2	0	n/a 2	n/a 0	1	1	2	0	2	0	2 2	0
B11	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	0
B12	2	0	2	ō	2	0	2	ő	n/a	n/a	1	1	2	0	2	0	2	0
B13	2	0	2	0	2	0	2	ő	2	0	1	1	1	1	2	0	2	0
B14	2	0	2	0	2	0	2	0	n/a	n/a	o	2	2	0	2	0	2	ō
B15	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	n/a	n/a	2	0
B16	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	0	2	0	2	0	2	0
B17	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
B18	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B19 B20	2	0	2	0	2	0	2	0	n/a	n/a	2	0	1	1	2	0	2	0
B21	2	0	2	0	2	0	2	0	n/a	n/a	0	2	2	0	2	0	2	0
B22	2	0	2	0	2	ő	0	2	2	0	n/a	1 n/a	2 2	0	2	0	2	0
B23	2	ō	2	ō	2	ŏ	2	0	2	ŏ	2	0	2	ő	2	0	2	0
B24	2	0	2	0	2	0	2	0	2	ő	0	2	2	ő	2	0	2	ő
B25	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
B26	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B27	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	1	1
B28	2	0	2	0	2	0	2	0	2	0	0	2	1	1	2	0	2	0
B29 B30	2	0	2	0	2	0	2	0	n/a	n/a	2	0	1	1	2	0	2	0
B31	2	0	2	0	2	0	2	0	n/a 2	n/a 0	2	0	2	0	2	0	2	0
B32	2	ő	2	0	2	0	2	0	2	0	n/a 2	n/a 0	2	0	2	0	2	0
B33	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	1	2	o	2	0	2	0
B34	2	0	2	0	2	0	2	0	2	0	2	Ö	2	0	2	0	2	ő
B35	2	0	2	0	2	0	2	0	n/a	n/a	2	0	2	0	2	0	2	ő
B36	2	0	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0
B37	2	0	2	0	2	0	2	0	n/a	n/a	2	0	1	1	2	0	2	0
B38	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	0
B39 B40	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
B41	2	0	2	0	2	0	2	0	n/a	n/a	1	1	1	1	2	0	2	0
B42	2	0	2	0	2	0	2	0	n/a 2	n/a 0	2 2	0	1 2	1	2	0	2	0
B43	2	0	2	0	2	ŏ	2	0	∠ n/a	n/a	2	0	1	0 1	2	0	2	0
B44	2	0	2	0	2	ő	2	ő	n/a	n/a	n/a	n/a	2	o	2	0	2	0
B45	2	0	2	0	2	0	2	0	n/a	n/a	1	1	2	0	2	0	2	ō
B46	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0	2	ő
B47	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B48	2	0	2	0	2	0	2	0	n/a	n/a	1	1	1	1	1	1	2	0
	92	0	92	0	92	0	90	2	42	0	62	26	80	16	93	1	95	1

	intro		exo 130		intro	on 7 138	•	on 7 202	į.	on 8 431		on 9 052	1	on 9 0089		on 9 165	exo 160	
	Α .	G	G	Α	G	A	Α.	G	G	Α	A	G	Α	G	A	G	С	G
1	94		95	1	93	3	94	2	61	35	61	35	80	16	88	8	87	9
	1.00	0.00	0.98	0.02	0.97	0.03	0.97	0.03	0.67	0.33	0.60	0.40	0.85	0.15	0.91	0.09	0.90	0.10
B1	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B2	2	0	1	1	2	0	1	1	2	0	1	1	2	0	2	0	1	1
В3	2	0	2	0	2	0	2	0	2	0	1	1	2	0	1	1	2	0
B4	2	0	2	0	1	1	2	0	1	1	1	1	2	0	2	0	2	0
B5	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
B6	2	0	2	0	2	0	2	0	1	1	2	0	1	1	2	0	2	0
B7	2	0	2	0	1	1	2	0	1	1	2	0	1	1	2	0	2	0
B8	2	0	2	0	2	0	2	0	2	0	2	0	1	1	2	0	2	0
B9 B10	2	0	2	0	2	0	2 2	0	2	0 2	1 2	1 0	2 2	0	1 2	1 0	2	0
B11	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
B12	2	0	2	0	2	0	1	1	2	0	1	1	2	0	2	0	2	0
B13	2	0	2	0	2	0	2	o	2	0	2	Ö	1	1	1	1	1	1
B14	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B15	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
B16	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
B17	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B18	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B19	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B20	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
B21	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B22 B23	2 2	0	2	0	2 2	0	2	0	2	0	2	0 2	2 2	0	0 2	2 0	0 2	2 0
B24	2	0	2	0	2	0	2	0	2	0	2	0	2	0	0	2	0	2
B25	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
B26	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B27	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B28	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0	2	0
B29	2	0	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0
B30	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B31	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B32 B33	2 2	0	2	0	2	0	2	0	2	0	1 1	1	1 2	1 0	2	0	2 2	0
B34	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B35	2	0	2	0	2	0	2	0	2	Ó	Ö	2	2	0	2	0	2	0
B36	2	0	2	Ö	2	0	2	ō	1	1	2	0	1	1	2	Ö	2	ő
B37	2	0	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0
B38	2	0	2	0	1	1	2	0	1	1	2	0	2	0	1	1	1	1
B39	2	0	2	0	2	0	2	0	2	0	2	0	1	1	1	1	1	1
B40	2	0	2	0	2	0	2	0	1	1	2	0	0	2	2	0	2	0
B41	2	0	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0
B42	2	0	2	0	2	0	2	0	2	0	0	2	2	0	2	0	2	0
B43 B44	2 2	0	2 1	0 1	2 2	0	2 1	0 :	2	0	1	1	1	1	2	0	2 0	0
B45	2	0	2	Ó	2	0	2	1 .	0	0 2	1 2	1 0	2	0	2 2	0	2	2
B46	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
B47	2	0	2	Ö	2	Ö	2	0	2	0	0	2	2	0	2	0	2	0
B48	2	0	2	0	2	0	2	0	1	1	1	1	2	0	2	0	2	0
	96	0	94	2	93	3	93	3	64	32	58	38	82	14		9	86	10

	exo 160		exor 303		exo:	n 10 972	exor 302		exor		exor 302		exo:	
	G	C	T	С	G	T	A	G	T	С	C	T	A	G
	95	1	94	0	86	6	71	7	83	11	94	0	80	14
	0.99	0.01	1.00	0.00	0.92	0.08	0.93	0.07	0.90	0.10	1.00	0.00	0.83	0.17
B1	2	0	n/a	n/a	n/a	n/a	n/a	n/a	2	0	2	0	2	0
B2	2	0	2	0	2	0	1	1	2	0	2	0	2	0
B3	2	0	2	0	2	0	2	0	1	1	2	0	1 2	1 0
B4 B5	2	0	2 2	0	2	0	2	0	2	0	2	0	2	0
во В6	2	0	n/a	n/a	n/a	n/a	n/a	n/a	2	0	2	0	n/a	n/a
B7	2	ő	2	0	2	0	2	0	2	0	2	0	2	0
B8	2	ő	2	ō	2	0	2	0	2	ō	2	0	2	0
В9	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B10	2	0	2	0	1	1	2	0	1	1	2	0	1	1
B11	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B12	2	0	2	0	1	1	2	0	1	1	2	0	1	1
B13	1	1	2	0	2	0	n/a	n/a	2	0	2	0	1	1
B14	2	0	n/a	n/a	n/a	n/a	n/a	n/a	1	1	2	0	1	1
B15	2	0	2	0	2	0	2	0	2	0	2 2	0	2	0
B16 B17	2 2	0	n/a 2	n/a 0	n/a 2	n/a 0	n/a 2	n/a 0	2	0	2	0	2	Ó
B18	2	0	2	ő	2	ő	2	0	2	0	2	0	1	1
B19	2	0	2	ō	2	ō	2	0	2	0	2	0	2	0
B20	2	0	2	ō	2	0	2	0	2	0	2	0	2	0
B21	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B22	2	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
B23	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B24	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B25	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B26	2	0	2	0	2	0	1	1	2	0	2	0	2	0
B27	2 2	0	2	0	2	0	2	0	2	0	2 n/a	0 n/a	2 n/a	0 n/a
B28 B29	2	0	n/a 2	n/a 0	n/a 2	n/a 0	n/a 2	n/a 0	n/a 2	n/a 0	2	0	2	0
B30	2	0	2	0	1	1	2	0	1	1	2	Ö	1	1
B31	2	0	2	0	2	0	2	0	1	1	2	0	1	1
B32	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B33	2	0	2	0	2	0	1	1	2	0	2	0	2	0
B34	2	0	2	0	2	0	1	1	2	0	2	0	2	0
B35	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B36	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B37	2	0	n/a	n/a	2	0	n/a	n/a	2 2	0	2 2	0	1 2	1 0
B38 B39	2 2	0 0	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	∠ n/a	0 n/a	∠ n/a	n/a	r/a	n/a
B40	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B41	2	0	2	0	2	0	2	0	2	0	2	0	2	0
B42	2	0	2	Ō	1	1	2	0	1	1	2	0	1	1
B43	2	0	2	0	1	1	2	0	1	1	2	0	1	1
B44	2	0	2	0	2	0	2	0	2	0	2	0	1	1
B45	2	0	2	0	1	1	2	0	1	1	2	0	1	1
B46	2	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
B47 B48	2 2	0	2	0 n/a	2 n/a	0 n/a	1	1 n/a	2 n/a	0 n/a	2 n/a	0 n/a	2 n/a	0 n/a
D48	95		n/a 74				n/a 67						_	

ER2 Exons with SNPs (v3.0)

(AB006589: 1-199, 49552-49750 of SEQ ID NO: 1)

CACGCGGCTTCATAAGCTAGATGCCAGTTAACTGTcgaga

ER2 exon -7

49671 A/T 3(C,S)* 49904 A/G 3(C,S) ggactggcccttg>tactgagtccgatgaatgtgcttgctctgctgg gcgattgcctgggaagcctgacagggcggcggcagctgggatgctggaga GTITCTGACGGTGGCCTGTTTCAACTACTGGCAGAGCTCATGTAAAACAG ggggacgctccctcctaggacgtccacactggagaaggaataagatgg aggaaccgcgctcaggttacagtcatcccaatatggttctgaagGTGCGT GGTTCAGGTCACTTAGGACTTGACCAGATACCGGGTTTCTTTTACAAGCC

TTTTGTTTTGATTAACAGTTTTTATCAAGTATAATGTACATACCATAACGTT CACCCATTTTAATGGATTCAATGATTTTTAGCATATTTACAGAGTGGTGC TTCTGAGGATATTTTATAGTAGTCCCACATATGGAATTAGATAATCTCTT

49994 A/G

ER2 exon -6 (AB006589: 200-507, 50928-51235 of SEQ ID NO: 1)

AACC

gttacagactgatcaaataaaatgaagactgagaatggcctgtttgtaag AGTAAGGAAACAGTGTTTACTCCTTTTTTGTAGAAGTGTAAATTTTTACAA CCATITIGAAGGGCAGITIGAIATIAICIACAACITAAAAITIGIGCITICC GAAATAAGGTGATACTGGAAGGACCAGGTTTTGGGGGGTACAATC ATAAGTTTTGGCTTTAAATGTTTTTAAATACCTTGCCTCTTAGacatccaa gtggagatatggcatttaaattcatgagattggatgagatcccaccaaag gaacaggttttaggtggagacaaaccaaataccgatgcctaggacactgcag tgtttagaattcaaggagatgagaaggaaacaggagggaagattgaaaag aagagtccagtgtgttatgaggaaaaccccaagagcatgctgccttacaa gacaggtgaaaaatgtgttctgtgaaagaaagagtaattaactgttaaat GTAATAAAAATACATAAAATCTTATGATAGAAATTATTATACATAAAGTT ATTGATAATTTCACCTGT

83980 G/A 3 (S) ID NO: 1) ER2 exon -5 (AB006589: 508-691, 83858-84041 of SEQ ATAAAAAGGAAATTTTTGTGCTGCTATTGGAAATTAGCTCTCTATATATT TCAACATGTTACACATATACAATGATCTAAAAACTTGTCTTACTTTTCC TATCCACTAGagggagacatcaacctgttgtggaaaagaatgatcactta aagtetttagaaattetgaaecaaetetetageaggtgateettgttaga ggagcaggaggaGAATGCACATGGATTAAGGAGCGAGAACACAGGTGAAC TTCAGCTTTTTTGCTAACAGTCAGACAAACTACTGACCCTGACTCAGTGA GATITICIATICIATICIATICACITICAGIAGAGAAAAAGACAAIAITICA AACTGAGCCATGCACCCAAAACAAGAACAGCCAAGAAGTGTTCACTTC GGCACATAGTAAGCAAATCATAAATGCTGAGTGAATGAAATATTAAATGA TATCAGTGCCCTGGGTT

FIGURE 9, sheet 1 of 7

-4 (AB006589: 692-903, 85942-86154 of SEQ ID NO: 1) ER2 exon

GTCGAAGGGCACACAACTAGGAAGTGTTTGTGCT

85938 G/A 2,3(N,C,I,A) GTTCTCTCCGTAGaaatcctgggctctctctcccagccacaaggttagg 3AAAACCCACCCTAGGCCCAAGCCTTGGAACTCCAAGCCTGGGTTCCATC CCTGCACTGGGCAATTCTGATCTATGTGCGCTAGTTTCCTTGTGTTTCTCT

ttgaaaaacagagcagatggaggtagtttgtagcctacaggtgccctgaa tgaagcttccacagtgctaaagtggaagaacgagggactccaagggaagg attcaaggctgggcccatgcacctgtgtaattcagaagagacccaggagg agatcagcgccctctaattagccctgGTAAGGAGCTCTGGGAAGTTACTGT

AACTCTCTCAGAAGAACCCAAACATGCGGGAACGTGACTTCTTACCTTCT GAAAGTCCACAAAATTCCTGATTGCCACCATTAATTTGTC

(AB006589: 904-997, 89037-89130 of SEQ

ER2 exon -3

ID NO: 1)

AGAGCAACCTTGTCTCATGGTCCTGGTGCCCAGGTATCAGGTTGGGTCTG TCTTGCTGCTTATGTCCTTGTTACCCTCTGAGGGCCCCCAGTCCAACGCAG TTACAAATAGCAAAGATCAAGACTGAAACACATGAGTGTGATTTAGAAAG AGTTGGCTGCAGGTGCTGCTTGCTCAGGTGGTTCATTTAAACTGCAGGTC ATCAATAAAGAATAAGTTACATAAATATGCTCATAGGTGGTCATTCCTAG ACAAGAAATTGACAACATTTCATTCAACAGtatctgggctctacaggaca gacatgcctccatttatgcaacaaataagaacagcatctcatgacagtgg agaaaacatgggatgtgcaggtaggTAGGTAAAGTTGGGTGGAAACTTTC ACCCTACCAAATGCACATGGGTGACTTTATAAAATAAATGTTAGCTCTCT GGGGCAGTGGACAGACAAAAGTTATTTTTTACCTGTTTGT GAGCCTCAGTTTTCCC ID NO: 1) ER2 exon -2 (AB006589: 998-1185, 89803-89988 of SEQ TICCICCITICCCICCACITITICCIA

89837 C/T 2,3(C,I,A,S) 90090 I/C TGTGTAAGACTTTTGCTAGACAGAGAGGGGTGGGGGTGAGAAGATGAGGAA ggttgtgttgacagGTAAGATGAGGCCTGTGGGGGGAGCCAATGTGCACGT TTAGCTTTTGCTTTCTTGCCTTTTTACAGggttttgttttgcctcttggta ccatggagaatgctagagatgtaagacatgcgctgtccaatcgcagcgca TCCACTGGGCTAATGTGCTCTTCACCTTATTTAGGCTCTTGGCTTTTGGGA

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FIGURE 9, sheet 2 of 7

ER2 exon -1 (93111-93488 of SEQ ID NO: 1)

ER2 exon 1 (104446-104897 of SEQ ID NO: 1)

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ER2 exon 2 (107368-107540 of SEQ ID NO: 1)

ER2 exon 3 (118610-118726 of SEQ ID NO: 1)

2 exon 4 (126774-127073 of SEQ ID NO: 1)

126711 A/G 2

FIGURE 9, sheet 4 of 7

ER2 exon 5 (130158-130296 of SEQ ID NO: 1)

130189 G/A 1,2,3(C),4(As), public

ER2 exon 6 (137853-137986 of SEQ ID NO: 1)

CACTTGCAGGCAGAGGATGATAGCATCAT

ER2 exon 7 (152379-152559 of SEQ ID NO: 1)

152603 T/C 4 (As)

FIGURE 9, sheet 5 of 7

ER2 exon 8 (154206-154500 of SEQ ID NO: 1)

TTTTGTCCCCATAGtaacaagggcatggaacatctgctcaacatgaagtg GAACTCCAGTGTGAGGAGCCTGGGGCTTCATCTTTCTGCTGTGGTCC GAGTGGGTTTAGGGGGTGGGGTAGACTGGCTCTGAGCAAAGAGAGCCGGGG caaaaatgtggtcccagtgtatgacctgctgctggagatgctgaatgccc acgtgettegegggtgeaagteeteeateaegggggteegagtgeageeeg gcagaggacagtaaaagcaaagggctcccagaacccacagtctcagt $oldsymbol{G}$ ${f A}$ cgcctggccctgaggtgaactggcccacagaggtcaca ${f G}$ gctgaagc ${f GT}$ GTGGGACACAGAGGCTGACAAGACATCGTCCTTGCCCTTGAGCCTAAA TTATCAGGGGGAGCTGGATGCACGAGCCATGGATAAATGGGCTGGGGGAAA AAGGCTTCGGGGTTCCTGTGGCTGCCTCGGAGGAGGGAATCTCAGCACCT

 $^{\circ}$ 154138 G/A 154202 A/G 2,3(C,A,S),4(As)

154431 G/A 1,2,3(N,I,A),4(all) 3^{rd} alt. end missing (63658)

ggtgggcagatca**G**ttgaggtcaggagtttgaaaccagcctggccaacat ccagcctgggtgactgacagagtgagactctgtca<u>AA</u>AAAAAAGAGTAGAG aggggaggagggactgggattgtgtggtcagctgtgCctgccaacagat atccaggtgcggtggctcacctgtaatcccaacactttgggaggccga ggcgaaaccccgtctctattaaaaatataataattagccaggcatggtgg tgtgtgcttgtaatcccagctactcaggaggctgaggcatgagaatggct tgaacctggaaggcaaaggttgcagtgagccgagattggggccaccgcact TAAACTGGGTATAAGATCCTTCCCTTTGCGTCCACCTCTCATGCCATGCT gatgcctatcctcttgtttaggtagaaagtaaaatgctactggacttaa atgggcaacaaggggctttgcctgttcatttgccatggagagggctggga \mathtt{A} attttaaaggaaggttaaaatac \overline{rr} tgaagttagttatgtggttaaaa aaagtgaagacggattctctcagatggtctccttaactgcccagggctt gcagatgtctcacccatgaggggcaccaatgtagaaagctgaggcttcat ctactgatgagcttcactggtttcccctgaggtttgtgctttggcagaga gcaggttaggaactgtgttcagtatcttccaataagaaaggggaaatgcc cacctcatttggaatgaagatggagactcttttgcctgaagcaacgatgg agcagtgaccctctaatcaactcggtggcctaaagaaaaatcttggggtaa cattttcacttcaGtttccctctgggatcattgtaatccatgaaaaaat accaccttcctttctattatcaatccAacaatttgataactgtaaacgct CACAATATTAAGCTTTTGAAATGCAGACCACACTTCCTTTCACTGCAACTT <u>ACTGAGCTTTGAGTGAAAGAAGCTGCAGTGGCCTCCCTGGAGATGGGGGAG</u> CAAACCAGCTTAAAGGCCCTTATCCTGAGGAAGAGACAAAAATTGACATG TGACTTGTCCCGCATCTCTACTTAAGggcagaaaaggcctctcaaacact ER2 exon 9 (159915-160827 of SEQ ID NO: 1) GCCTTTGCCATTCCCTACA

(all); 160052 G/A 1,2,3(N,I,A,S),4 160089 A/G 1,2,3 (N,I,A,S) 160165 A/G 1,2,3(A),4(all)

160376 C/G 1,2,3(N,C,A)

S 160602 G/C FIGURE 9, sheet 6 of 7

ER2 exon 10 (302474-303300 of assembled ER2 BAC, 302474-303300 of SEQ ID NO: 1)

GACAGeteteteaetetetegagattgtttatgetgagggaageeag ${\tt ctgccatggtgtgtgaggcagactcctggaggagcccacAtgtctgtaagta}$

 \mathtt{gcC} tttgtcgacaccttgac $extbf{T}$ gcattctcatgagagaccttgagccagag atacttagctaagccatgcccatggactcctgacccacagaaactgtgat gaagcagatctttgaggcctgtcaacagccacgggaatgagcttggaag cagatcccacctcctccacacaagtcgagccttcagatgagcctgca

aaaatagctaatatatagctcaaaactgg**A**agcaacccaaatatctatta gatGaatctcaaaggcattatgttaagtgaaacaagtgagccacgtaaga acactacttggcaatcaaataattaactatgcattaagtgtaacaacctg actggtagataaacaaactactcatttccaaacttatttccaaaactgga aataagtttgttttcaagctgctaacttatggagtaatatgttacaca

GAGGTCAGGAGTTCAAGACCAGCCTTGGCCAACATGGTGAAATCCTGTCT CTACTAAAAATACAAAATAAGGTCAGCGTGGTTGGCACACGCCTGTAATC ggggattgactgcaaaggcaggaggaaacgtcttgggagatggagatg ttccttatattgatggcggtggttgctacacaactgcacttttatcaaaa cttacctaactgctacttaaaataggtgtattaatatttttactgtatgt aaattatacctcaataaatttgatttaaaaaacAGGCCGGGTGTGGC TCACGCCTGTACTCCCAGCACTTTGGGAGGTCGAGGTGGGCAGATCAGCT atagtaataggaaacagtgagtgatcacctagggttgaagacaggtgaaa otacatactgtttgattccctctatatgatattctagaaaaggcaaaact TCAGCTACTGGGGAAGCTGAGGCAGAAG

302556 A/G 2,3(all)

302671 C/T 3(A); 302689 T/C 2,3(all)

302848 A/G 2,3 (N)

302972 A/G 2,3(N,I,A,S)

A, Afric-Amer; I, Indo-Pak; S, SW Native Amer), 4= CEPH (Ca, Caucasion; As, Asian; * Observed in: 1= cDNA, 2= Liverpool clinical, 3= Coriell (N, North Eur.; C, Chinese; Af, Afric-Amer) (bold = SNP position, underlined = primer sequences, lowercase = exon, bold/italics = alternative endings to exons 8 and 9 seen in different splice variants.)